



Universidade do Porto

FEUP Faculdade de
Engenharia

Master's in Innovation and Technological
Entrepreneurship
2015-2017

Extending Business Model Ontology to
Social Businesses

Submitted By:
Samiksha Todaria

Supervisor:
Professor João José Pinto Ferreira

Co-Supervisor:
Carlos Azevedo

ACKNOWLEDGEMENT

I would like to express my gratitude to my research supervisor, Professor João José Pinto Ferreira, for his constant support and motivation. Without his guidance and persistent help this dissertation would not have been possible. I would like to thank my co-supervisor, Professor Carlos Azevedo, for his valuable advice and feedbacks.

I am grateful to all the professors in MIET for instilling in me an entrepreneurial mindset, the non-academic staff for helping me to fulfil administrative requirements and solving my humble problems, and EACEA (The Education, Audiovisual and Culture Executive Agency) for providing the opportunity to study in Europe.

I am thankful to Professor João Menezes, Professor Miguel Alves Martins, and Professor Helena Gata who had spent their time in evaluating the ontologies developed and making the models more robust. I would also like to thank Sandeep Mehto for allowing me to do a case study about his venture, Bharat Calling.

I am indebted to my family who has always encouraged me and demanded better performance. Cheers to all my friends in Porto for making this journey so memorable and my friends in India for reminding me the purpose of my stay in Europe.

ABSTRACT

The Business Model Canvas (BMC) formulated by Alex Osterwalder and Yves Pigneur offers an easy, visual and concise canvas to create, innovate and discuss a business model. Nevertheless, in the case of social ventures, the business model canvas should not only facilitate the process of finding a business opportunity but also identify the social impact that the ventures aim to accomplish (Burkett, 2013). The canvas should be helpful in realising the interactions, understanding the interdependencies and recognising opportunities (that align and cause tension) between business and social impact. This study aimed to extend the business model ontology, underlying the business model canvas, to social businesses and consolidate various social entrepreneurial concepts into a unique framework.

On doing a review of the literature, it was evident that the body of knowledge in the field of social entrepreneurship needs a framework that could integrate significant diverse concepts and perspectives of social businesses into a unique social business model. Consequently, an ontology was developed for social businesses and design science approach was used to build, evaluate and validate the ontology. Theory of Change has been applied in the study to illustrate how social businesses aspire to achieve reforms in society and provide sustainable solutions that ultimately make the ventures obsolete. The interviews with the experts from the discipline of social entrepreneurship helped in the assessment of the ontology while case study on a social venture proved its validity. The instantiation of the ontology showed its real-life applicability.

This study effectively answered the research question and the competency questions posed. The exploratory case study on Bharat calling showed that the ontology represented social businesses in a correct manner. The responses from the social entrepreneur and the instantiation of the ontology were assuring of the applicability of the ontology. Therefore, it can be said that this research has successfully extended the business model ontology by Osterwalder (2004) to social businesses, within the limitations of the study.

CONTENTS

ACKNOWLEDGEMENT	3
ABSTRACT.....	5
LIST OF FIGURES	9
LIST OF TABLES	11
1. INTRODUCTION	13
1.1. Motivation	14
1.2. Objective of the Research	14
1.3. Overview of the Methodology	14
1.4. Structure of this Dissertation.....	15
2. REVIEW OF LITERATURE.....	17
2.1. Understanding the Frameworks of Social Business Models.....	24
2.2. Different Perspectives and Positions of Social Business Models	24
2.3. Utilising Proposed Future Researches.....	25
2.4. Conclusion.....	25
3. METHODOLOGY	27
3.1. Introduction	27
3.2. Research Question.....	27
3.3. Research Design.....	27
3.3.1. Design Science Approach	27
3.3.2. Building an Ontology	29
3.4. Conclusion.....	31
4. PROPOSING EXTENSION OF THE BUSINESS MODEL ONTOLOGY FOR SOCIAL BUSINESSES.....	33
4.1. Theory of Change.....	33
4.1.1. ‘Top Level Ontology for Social Business Value Proposition.....	35
4.2. Business Model Ontology and its Extension	37
4.2.1. Sub-Ontology for Value Proposition	39
4.2.2. Sub-Ontology for Stakeholder Interface	43
4.2.3. Sub-Ontology for Resources.....	48
4.3. Conclusion.....	51
5. EXPLORATORY CASE STUDY AND DISCUSSION	53
5.1. Description of the Case Study	53

5.2.	Validation through Case Study	53
5.2.1.	Validation of Top Level Ontology for Social Business Value Proposition.....	53
5.2.2.	Sub-Ontology for Value Proposition	55
5.2.3.	Sub-Ontology for Stakeholder Interface	56
5.2.4.	Sub-Ontology for Resources.....	57
5.3.	Discussion	58
5.4.	Limitations of the Study	59
6.	CONCLUSION	61
	BIBLIOGRAPHY	63
	ANNEX A.....	69
	ANNEX B	79

LIST OF FIGURES

Figure 1. Framework for Understanding Design Science Approach	28
Figure 2. Characteristics of a Theory of Change	34
Figure 3. Top Level Ontology for Social Business Value Proposition.....	35
Figure 4. Overview of Business Model Ontology.	38
Figure 5. Business Model Canvas.....	38
Figure 6. Sub-Ontology for Value Proposition.....	39
Figure 7. Sub-Ontology for Stakeholder Interface	43
Figure 8. Sub-Ontology for Resources	48
Figure 9. Instantiation of Top-Level Ontology for Social Business Value Proposition.....	55
Figure 10. Instantiation of Sub-Ontology for Value Proposition	56
Figure 11. Instantiation of Sub-Ontology for Stakeholder Interface	57
Figure 12. Instantiation of Sub-Ontology for Resources	58

LIST OF TABLES

Table 1. Literature Review	17
Table 2. Ontology Requirements Specifications...	29
Table 3. Starting Situation	69
Table 4. Strands of Action	69
Table 5. Intended Outputs.....	69
Table 6. Steps of Change	69
Table 7. Intended Outcomes	70
Table 8. Negative Influence	70
Table 9. Negative Impact	70
Table 10. Ability to Pay	71
Table 11. Ecological Footprint	71
Table 12. Trust.....	71
Table 13. Transparency.....	71
Table 14. Beneficiary.....	72
Table 15. Positive Externality.....	72
Table 16. Empowerment.....	72
Table 17. Sustainable Solution	72
Table 18. Value Creation	73
Table 19. Stakeholder	73
Table 20. Beneficiary.....	73
Table 21. Cooperative Member	73
Table 22. Customer.....	74
Table 23. Employee	74
Table 24. Recipient	74
Table 25. Supplier.....	74
Table 26. Impact Investor	74
Table 27. Venture Philanthropist	75
Table 28. Government	75
Table 29. Impact Payer	75
Table 30. Community	75
Table 31. Client.....	76
Table 32. Entwinement	76
Table 33. Relationship	76
Table 34. No Relation	76
Table 35. Donor/Recipient.....	76
Table 36. Transactional.....	77
Table 37. Relational.....	77
Table 38. Rhetoric.....	77
Table 39. Social Capital.....	77

1. INTRODUCTION

Social entrepreneurship has significant repercussions in the global economy as it creates novel industries, validates fresh models of business and allocates resources to social issues that had been ignored by the government and corporates (Santos, 2009).

... social entrepreneurs operate in areas of neglected positive externalities, develop economic action to demonstrate a solution to address the externality, and then often influence governments to create legislation that legitimates and supports their innovation. This facilitates scaling-up and replication of the innovation, thus reducing the market failure of service under-provision in their chosen field. This systematic identification and solution of problems related to neglected positive externalities is the distinctive role of social entrepreneurship in society. (Santos, 2009, p. 24)

Running a social enterprise not only means to introduce business skills in the social realm but also to justify the social mission and retain financial viability of the business (Burkett, 2013). This balance can be achieved by using a business model that helps in understanding and forming logical steps for creating, delivering, and capturing social and financial value in a business. Thus, having an intelligible business model is as important for social enterprises as it is for normal ventures because business model helps in early identification and resolution of various challenges and issues. It reduces the chances of the failure of a social enterprise, helps it in becoming sustainable and financially viable (Burkett, 2013).

The Business Model Canvas (BMC) formulated by Alex Osterwalder and Yves Pigneur offers an easy, visual and concise canvas to create, innovate and discuss a business model. Nevertheless, in the case of social ventures, the business model canvas should not only facilitate the process of finding a business opportunity but also identify the social impact that the ventures aim to accomplish (Burkett, 2013). The canvas should be helpful in realising the interactions, understanding the interdependencies and recognising opportunities (that align and cause tension) between business and social impact. With an additional focus on the social aspect of a business, BMC can become immensely valuable to social entrepreneurs by increasing their potential to effectively manage the venture and make it sustainable (Burkett, 2013).

The reality for social enterprises is that they cannot work if the business model does not work financially (then there is no business). But they also cannot work if the social objectives are not realised within the business (then there is no social enterprise, just a business). (Burkett, 2013, p. 7)

The Business Model Canvas needs to include more building blocks to become further applicable for social enterprises because in its present form the BMC does not completely capture the value created by social businesses (Qastharin, 2014). Thus, this research aims to build a new framework for modelling a social business by extending the ontology underlying the business model canvas via Osterwalder (2004). The researcher has assimilated varied concepts and perspectives of social entrepreneurship in order to generate a clearer, credible and useful model for social enterprises.

1.1. Motivation

This dissertation is an attempt to converge the researcher's academic knowledge, Master's in Social Work and Master's in Innovation and Technological Entrepreneurship, and delve into the discipline of social entrepreneurship. The interactions with social entrepreneurs, during the researcher's former Masters, helped her to understand that social ventures are usually started by individuals who resolve to create a positive change in the society. They are not as enthusiastic about the commercial aspect of their venture as they are for its social repercussions. Most of the business models or tools lack social characteristic and the social business models need better integration. The researcher's goal is to create a holistic social business model canvas by using this research as a basis for it.

Also, writing this thesis is perceived as an opportunity to thoroughly understand the social business model. It would help the researcher in future to create her social venture through which she intends to serve her community as well as sustain herself in the long run.

1.2. Objective of the Research

"Despite an increasing volume of empirical studies of social enterprise in management and organization research, many have raised concerns about the lack of a cohesive knowledge base in this area" (Lee, Battilana, & Wang, 2014, p. 1). Therefore, the objectives of this research are as follows:

- build a consolidated framework for multiple concepts and viewpoints;
- extend the business model ontology by Osterwalder (2004) to social ventures;
- adjust the contemporary business paradigm to social businesses;
- contribute to the existing body of knowledge in the discipline of social entrepreneurship;
- assist the academicians and the practitioners in developing a social business model.

1.3. Overview of the Methodology

Based on the analysis of the literature, the research question was formulated as follows:

- How can business model ontology be extended, so that it covers the social business perspectives to be used by the social entrepreneur in the process of development of the social business model?

Keeping in mind this research question, a qualitative method of research was deemed appropriate for this study. Design Science approach was applied to produce a viable artifact (ontology) for social businesses with the objective of integrating the current perspectives and concepts and extending the existing business model ontology. UML (Unified Modelling Language) was used as a construct to build the ontology. Experts from the field of social entrepreneurship were interviewed to evaluate the ontology. An exploratory case study helped in its validation, and instantiation of the ontology showed its real-life applicability.

1.4. Structure of this Dissertation

- Chapter 1 gave a foreword about the topic of the research chosen and the research conducted. The chapter presented the motivation, objectives and overview of the methodology.
- Chapter 2 reviews the scholarly writing on the topic of research which helped in positioning the topic in the context of the existing knowledge and debates.
- Chapter 3 explains the how, what, and why of the research conducted. It includes the approach and design of the study, saturation and validation of the data, and an overview of the ontology development process.
- Chapter 4 describes the ontology developed and the interconnection among each term of the ontology.
- Chapter 5 elucidates the validity of the ontology through an exploratory case study by showing a real-life applicability of the ontology through instantiation, and presents the limitations of the study.
- Chapter 6 concludes the entire study, proposes recommendations for social entrepreneurs and the future study.

2. REVIEW OF LITERATURE

An academic research requires a methodological analysis of the past literature since it is of paramount to be aware of the existing body of knowledge (Levy & Ellis, 2006). Additionally, an efficient review of literature helps in providing a valid premise to the topic of research, selecting the research methodology and elucidating the contribution that the proposed research makes to the present knowledge field (Levy & Ellis, 2006).

“An effective and quality literature review is one that is based upon a concept-centric approach rather than chronological or author-centric approach” (Levy & Ellis, 2006, p. 173). Keeping this in mind, the researcher looked for articles published from 2001 to 2016 in Scopus (a vast online database of abstracts and citations with peer-reviewed literature) based on the keywords ‘social entrepreneurship AND theory OR model’. A total of 123 documents were obtained from the search and organised in descending order of their number of citations in Microsoft Excel. The abstract from 70 of 123 papers was read to rank these papers depending on their significance to the topic of research. 35 articles had been read and analysed to find the gap in the literature. The read articles were further categorised as shown below in Table 1.

Table 1. Literature Review (listed by relevance) *SE – Social Entrepreneurship

Authors and Year	Keywords and Concepts Covered	Future Research
(Santos, 2009)	<i>Value creation, neglected positive externalities, value appropriation.</i> Discusses compromise between value creation and value appropriation. Explains the purpose and logic of SE.	Further discussion about SE in the framework related to economic organizations and working with a modern economy.
(Datta & Gailey, 2012)	<i>Women’s entrepreneurship, social entrepreneurial venture in India, constituents of empowerment entrenched in the social business model, individual perception of empowerment.</i> This article aims at broadening the existing understanding of women’s entrepreneurship by emphasising on fewer considered ventures.	Investigates how elements of empowerment are entrenched in different models of business and then compares those models in other settings. Comparative research about failed and successful cooperatives would help in identifying enablers and the restraints of collective entrepreneurship.
(Ruebottom, 2013)	<i>Meta-narratives, Rhetorical strategy, Institutional change, SE, Legitimacy.</i> This paper talks about the way social enterprises attain legitimacy for social changes. It states that the rhetorical strategies utilised by these ventures shape the organizations as protagonists and those that contest the transformation as antagonists.	Analysing the stakeholders’ rhetoric, especially from stakeholders that present most facets of the institutional spheres, is a crucial path for further research that could showcase the usefulness of the protagonists’/antagonists’ rhetorical strategies.

Authors and Year	Keywords and Concepts Covered	Future Research
(Bacq & Lumpkin, 2014)	<i>SE, research agenda, family business, resource-based view.</i> Depending on a systems model, the paper frames 3 organisational challenges of social enterprises' business management which can be focussed on through learnings from the family businesses literature; getting together several stakeholders, attaining competitive benefits and adopting sustainable solutions.	
(Dzombak, Mehta, Mehta, & Bilén, 2013)	<i>Systems thinking, business strategy, SE, appropriate technology.</i> This paper describes the ways in which E-Spot Canvas influences the principles of systems thinking and allows users to explore the ideal dispersal of their minimal resources.	
(Ebrashi, 2013)	<i>SE, Social Enterprise, Social change, Social impact, Entrepreneurialism, Organization typologies.</i> The behavioural theory of SE examines the context based issues that create social ventures and how this typology measures social impacts, mobilise resources, and brings sustainable social changes.	How does social enterprise measure the economic performance? And finding the unique strategy used by a social enterprise to attain economic sustainability and achieve social objectives.
(Uygur & Marcoux, 2013)	<i>SE, double bottom line, knowledge-based, sharing, social mission.</i> This paper uses the knowledge-based theory of the firms as a theoretical standpoint and identifies the central features that distinguish SE from ordinary entrepreneurship and concludes that intricacy in SE is evident when social venture makes choices about safeguarding its knowledge.	The theoretical propositions proposed in this paper needs to be checked empirically; build and test hypotheses that involve using of knowledge-sharing practices; build and test hypotheses that involve using of knowledge protection practices and the public's reaction to such practices.
(Newbert & Hill, 2014)	<i>Value creation, SE, surplus.</i> This paper backs up for a new explanation of the concept that distinguishes activities that generate real values for society through the entrepreneurial system from those which do not.	Consider non-market based actors in future theorising about organisations.

Authors and Year	Keywords and Concepts Covered	Future Research
(Stephan, Uhlander, & Stride, 2015)	<i>SE, institutional void, comparative entrepreneurship, cultural values, social capital, institutional support perspective.</i> Deliberates on resources' support from formal as well as informal institutions and focuses on motivational supply sides that influence SE.	To assimilate resource-based methods meticulously into theorizing about national contexts and institutions' influence on entrepreneurial activities.
(Spear, 2006)	<i>Corporate social responsibility, Co-operative organizations, Entrepreneurialism, and Behavioural approach.</i> The article has developed a framework which would allow economic ventures as well as SE to be analysed and accommodates the frequently neglected collective or pluralistic aspects of entrepreneurship.	Provides a number of problems for future research on a larger sample of social enterprises like co-operatives, mutual and voluntary organisations. Varied and distributed perspectives on entrepreneurship may warrant additional empirical research in the Small and Medium Enterprise sector.
(Qastharin, 2014)	<i>Social enterprise, business model, SE, Business Model Canvas.</i> From this research, it was found that modifications are essential for Business Model Canvas to capture the social enterprises' business models and based on the findings it concluded that how social enterprises create, deliver and capture value.	Design new business model and devise strategy founded on the new business model; expand the number and diversity of the objects of study with the same method; compare the same objects of study with various business models' frameworks.
(Burkett, 2013)	<i>Business model, SE.</i> The paper describes a few simple adaptations in Business Model Canvas to reflect 'especial' aspects of social enterprises.	
(Welter, 2011)	The paper contends that context is significant to understand how, when, and why of entrepreneurship and who gets involved. It identifies tasks that researchers must face in contextualizing theory of entrepreneurship.	Scope to develop methodological options when providing a context to entrepreneurship, together with a unit of analysis, multilevel models, sampling and analysis.
(Nicholls, 2010)	<i>Neo-institutional theory, SE.</i> This article has conceptualised SE as a discipline of action in a pre-paradigmatic stage that presently wants a standard epistemology. This research highlights the microstructure of legitimation with approaches from the neo-institutional theory that portray the growth of SE in the relation to its vital	The article ends by defining an important part for academic research on SE in the relationship of solving differing discourses in its upcoming paradigmatic expansion.

Authors and Year	Keywords and Concepts Covered	Future Research
	actors, emerging narrative logics and discourses.	
(Pless, 2012)	Describes SE and discusses theory building by updating the discourse on SE; overview of the articles contained in that issue of the journal.	
(Muñoz & Kibler, 2016)	<i>Institutional complexity; Opportunity; SE.</i> Elucidates the importance and (complex) involvement of regional authorities in social entrepreneurship.	
(Chepurenko, 2015)	<i>Innovation entrepreneurship; SE; institutional entrepreneurship.</i> The article begins with a concise synopsis of the state of the art and gives a small anticipation exercise of the potential areas, research design and actors of a future theory of entrepreneurship. It also talks about entrepreneurship research in Russia.	Future research may be concerned with the self-legitimation and further development of the field.
(Cohen & Munoz, 2015)	<i>Civic accelerators; collaborative business models; complexity science; purpose-driven entrepreneurship; social embeddedness; territorial embeddedness; urban entrepreneurship.</i> Extends theory to place-based entrepreneurship by emphasising the unique interplay between cities' purpose driven entrepreneur and the urban places where they work.	How do purpose-driven urban entrepreneurs participate with citizen and civil servants to jointly develop answers to issues that were in the field of civil servants?
(Robb & Gandhi, 2016)	<i>SE, systems of systems, risk management, flexibility dynamic.</i> Social ventures function as systems of systems, an assortment of complex systems functioning together to accomplish a complete result; identifies systemic risks in the examples and shows how the applications of systemic risks management approaches can profit SEVs.	To find out that an SEV that does operate as a SoS utilizes systemic risks managements approaches more effectively than the non-SoS counterparts that use traditional risks managements approaches; further examination of the relationships between SE and complexity theory;
(Hechavarría, 2015)	<i>Cultural shift, Post-modernization, World Values Survey, Commercial entrepreneurship; SE; Global Entrepreneurship Monitor, Modernization.</i> This study explores that whether cultural changes and cultural	Discover the multilevel connections to cultural values and on the effects of national values on the choices of individuals to get into ventures of a societal or commercial

Authors and Year	Keywords and Concepts Covered	Future Research
	values, operationalised through the World Values Survey (WVS), affects the occurrence rate of commercial and SE at the national arena.	kind over paid employment; scrutinise cultural factors that encourage necessity and opportunity entrepreneurial activities, and examine how that interconnects with the procedure of value creation.
(Paniagua, Mas-Tur, & Sapena, 2015)	<i>SE activity (SEA), gravity equation, foreign direct investment (FDI).</i> Contributes to a complete conceptual framework to analyse the connection between SE and international businesses; does an econometric review of SEA's impact on greenfield FDI, foreign projects and foreign employments; proposes a theoretical understanding of legitimacy theory's significance in elucidating the connection between FDI and SEA.	Examines the connection between CSR and SEA in global businesses over an extensive theoretical basis of how SEA and CSR relate with FDI.
(Kury, 2014)	<i>SE, dialectic process, totality, developmental psychology, praxis, social construction, contradiction, social change, social entrepreneur intent, social change agent.</i> This paper talks about the mobilization of individuals to social actions and takes forward theoretically grounded propositions to forecast who is expected to mobilize and moderators of the mobilization to social actions.	An assortment of case studies for conducting a meta-analysis for exploring incentives in the narratives that could be utilised to assess features of the model and provide extra theory development into the SE's antecedents.
(Smith, Meyskens, & Wilson, 2014)	<i>Social ventures, networks, organizational identity, partnerships, relational identity, strategic alliances, SE.</i> Sketching an identity-based viewpoint, the article builds a theoretical model for strategic coalitions growth and changes by elucidating how, and through what outcomes, leader of a social venture would affect the expansion of an organisational identity within its own organisation and strategic coalition partner organisations.	Find out the consequence of organisation's size, the socialisation courses adopted by the organisations, and diverse techniques to operationalise organisational identity.
(Gras & Mendoza-	<i>SE, Non-profit, Opportunity exploitation.</i> Based on resources dependence theory, the paper states that	Investigate link between market-based incomes proportion and measures such

Authors and Year	Keywords and Concepts Covered	Future Research
Abarca, 2014)	performance is mainly dependent on the extent to which not for profits aim at market-based opportunities. On analysing the population of Canadian charities, the paper discovers a U-shaped relationship which indicates that little to modest levels of incomes from market decrease the probability of organisations' exit.	as incomes volatility, mission attainment or organizational growth; other strategies that Not for Profits Organisations can utilise to manage the dependency on resource providers; analyse bilateral strategies, like alliances and co-optation, which are common in the non-profit sector.
(Beckmann & Zeyen, 2013)	<i>SE, social franchising, volunteer involvement, scaling.</i> By using a Hayekian viewpoint, the paper gives an elucidation to understand the reasons for social franchising being an appropriate scaling strategy for only few SE organisations. This is illustrated by using the Ashok Fellow Wellcome.	What kind of social undertakings select social franchising as a scaling strategy and succeed; analyse if it associates to particular small-group reasoning venture models; discuss about the variances and resemblances between societal and normal business.
(Lee, Battilana, & Wang, 2014)	<i>Research methods; Social enterprise; SE.</i> The paper discovers that the major amount of empirical researches have used social venture as a setting for developing theory, but have not encompassed deductive tests of existing theories. The paper concludes by deliberating possible implications for management and organization researches on social enterprises.	
(Ann-Kristin Achleitner, Wolfgang Spiess-Knafl, 2014)	<i>SE; financing structure.</i> This paper analyses the funding options for social ventures and builds a framework to explain the funding arrangement of social ventures founded on possible struggles emerging because of a varied funding structure.	Analyse if social entrepreneurs may want the financing source that provides them maximum flexibility and freedom as they become apprehensive about losing control and entrepreneurial flexibility.
(Mueller et al., 2014)	<i>SE, social business, theory development, social innovation.</i> Summary of 4 papers presented at the Academy of Management conference in 2013 discussing the theme of 'What is Holding Back SE', solving the issues of theory progress in this emerging discipline.	

Authors and Year	Keywords and Concepts Covered	Future Research
(Vestrum & Rasmussen, 2013)	<i>Community entrepreneurship, Resource mobilisation process, Music festivals, Embeddedness, SE, Norway, Communities.</i> This article intends to propose a theory about the resources mobilization method of budding communities' ventures. Following resource dependence theory, it examines the way communities' ventures bring novel notions and events into traditional communities.	The significance of creating acceptability to enable the acquisition of resources needs future investigations.
(Hjorth, 2013)	<i>Entrepreneurship, public, society, affect, citizen, intensity, desire.</i> This paper supports the desiring-social-change that can be found in current work of by theorists and policy-makers as instances of 'SE'. It is done as an effort to strengthen the existence of the social and societal in contemporary discussion on the relationship between entrepreneurship and society.	
(Forster & Grichnik, 2013)	<i>SE, intention formation, corporate volunteering.</i> The paper examines precursors of social entrepreneurial actions in relation to the individual and environmental action in a corporate context; identifies the antecedents of intention formation for social entrepreneurial.	Varied perspectives of empathy in the context of SE and comparison to general research on entrepreneurial behaviour; to explore new ways to progress multidimensional research on SE.
(Nguyen, Szkudlarek, & Seymour, 2015)	<i>social impact measurement, SE, interdependence.</i> Influence of capital relations and social impact measurements on social enterprise in Vietnam.	Find the impact of diverse kinds of financing relations on social impacts measurements in varied cases and settings where SE have other history and resource constraint.
(Lewis, 2013)	<i>Natural disaster, SE.</i> The article explores the relevance of scrutinising micro-interaction rituals within bounded context because of its probability to result in macro-behavioural/ cultural changes. Collins' interactions rituals chain theory is utilised as a framework for investigating the micro-sociological communications.	Examine Johnson's work and the Student Volunteer Army from different viewpoints and theories which could involve those that are relative in nature: such as how did a different cluster of students' initiate in the aftershock of the Christchurch earthquakes sustained themselves.

Authors and Year	Keywords and Concepts Covered	Future Research
(Zafeiropoulou & Koufopoulos, 2013)	<i>Social enterprises, relational embeddedness, social franchising, SE.</i> This article examines the new inter-organizational setup called social franchising appeared as a probable answer to resolve the problems of development and funding sustainability that social ventures go through.	Recommends for a quantitative research to check the hypothesised connections derived from the SoFraM; investigate the differences between businesses' format franchising and social franchising.

While reviewing the literature, it is vital to identify “... where excess of research exists (i.e. what is already known?) and where new research is needed (i.e. what is needed to be known?)” (Levy & Ellis, 2006, p. 172). On investigating 35 articles in the aforementioned manner, it was evident that several authors have written about social entrepreneurship from different positions and perspectives. Thus, the papers crucial for this research were grouped together under two main themes – ‘Understanding the frameworks of social business models’ and ‘Different perspectives and positions of social business models’. This dissertation also utilises some of the future research suggested by the authors in the articles analysed above. The literature review is concluded by identifying and discussing the gap in the literature.

2.1. Understanding the Frameworks of Social Business Models

Roger Spear in his article “Social Entrepreneurship: A Different Model?” developed a framework which enables both social and economic entrepreneurship to be scrutinised and accommodates the often ignored pluralistic or collective aspects of social entrepreneurship (Spear, 2006). While Ingrid Burkett has written a paper to present a few simple adaptations in Business Model Canvas for reflecting 'especial' dimensions of social enterprises (Burkett, 2013). In her case study, Annisa Rahmani Qastharin explains that modifications are essential for Business Model Canvas to capture the social enterprises’ business models and based on the findings from her research it was shown how social enterprises create, deliver and capture value. In addition to these articles, “The Praxis of Systems Thinking for Concurrent Design Space and Business Strategy Exploration” elaborates the way E-Spot Canvas influences the doctrines of systems thinking and allows users to explore the ideal dispersal of the minimal resources (Dzombak et al., 2013).

2.2. Different Perspectives and Positions of Social Business Models

In the paper “Empowering Women Through Social Entrepreneurship: Case Study of a Women’s Cooperative in India”, the writers suggest that future research should investigate the elements of empowerment that are entrenched in different business models, then compare those models in other contexts and identify enablers and the restraints of collective types of entrepreneurship (Datta & Gailey, 2012). While Ruebottom proposes to analyse the stakeholder rhetoric especially from stakeholders that present most characteristics of the institutional domains as it is crucial for showcasing the effectiveness of the protagonists’/antagonists’ rhetorical strategy (Ruebottom, 2013). Interestingly, Filipe M. Santos has elaborated the important concepts of value creation, value appropriation and neglected positive externalities in his paper “A Theory of Social Entrepreneurship” and he states that “Social entrepreneurship is the mechanism that leads societies to more efficient economic outcomes by ensuring that positive externalities are systematically explored for the benefit of society” (Santos, 2009, p. 1)

Moreover, Friederike Welter contends that context is significant to understand how, when, and why of entrepreneurship and who gets involved. He states that “Moreover, it sees entrepreneurship as taking place in intertwined social, societal, and geographical contexts, which can change over time and all of which can be perceived as an asset or a liability by entrepreneurs” (Welter, 2011, pp. 176) and further adds to it that “Thus, context contributes to explaining why some entrepreneurs might recognize opportunities and others do not and why the outcomes of entrepreneurial activities might vary across different countries, regions, and other contexts (Baker, Gedajlovic, & Lubatkin 2005)” (Welter, 2011, p. 177). In the article “Risky business? The Survival Implications of Exploiting Commercial Opportunities by Non-Profits” the author, based on resources dependence theory, elaborates that performance of an organisation is mainly dependent on the level to which not-for-profits aim at market-based opportunities (Gras & Mendoza-Abarca, 2014).

2.3. Utilising Proposed Future Researches

Almost every article analysed above had some suggested future research based on its content. Some of the proposed future research utilised in this thesis are as follows:

- Ebrashi (2013) suggests the readers to conduct a future research for finding the unique strategy used by social enterprises for attaining economic sustainability and achieving social objectives.
- Newbert and Hill (2014) recommend considering non-market based actors in future theorising about organisations.
- Nicholls (2010) “... concludes by delineating a role for scholarly research on social entrepreneurship in terms of its future paradigmatic development” (Nicholls, 2010, p. 612).
- Stephan, Uhlander, and Stride (2015) propose to assimilate resource-based methods meticulously into theorizing about national contexts and institutions’ influence on entrepreneurial activities.
- Rahmani Qastharin (2014) advocates designing of the new business model and devising strategies for the new business model.
- Vestrum and Rasmussen (2013) advise considering the significance of creating acceptability to enable the acquisition of resources.
- Forster and Grichnik (2013) “... encourage fellow researchers to find new ways to advance multi-dimensional research on social entrepreneurship” (Forster & Grichnik, 2013, p. 174).

2.4. Conclusion

Following the literature review done in the aforementioned table, the researcher realised that there are some social business model canvases ((Spear, 2006), (Burkett, 2013), (Qastharin, 2014), (Dzombak et al., 2013)) but none of them integrate all the perspectives in one model. So, it is evident that there is a lack of a unified model for social businesses. The current business model canvas, via Osterwalder (2004), based on business model ontology does not cover social business perspectives. Therefore, the challenge lies in extending the business model ontology so that it covers those missing perspectives in a way that the resulting business model canvas may be used by social entrepreneurs for planning their ventures.

Additionally, considering the suggestions for proposed future research from the articles reviewed helped in making this thesis richer and diverse while also contributing to the body of knowledge in the discipline of social entrepreneurship.

3. METHODOLOGY

3.1. Introduction

This chapter presents the approach followed to conduct the research and answers the research question. The “how” research question is directed to a qualitative research method which was used to do an in-depth study to understand the phenomena. The design science approach was utilised to support the construction of the ontology (artifact) by using Osterwalder (2004) business model ontology as the basis. Informed arguments underpinned the hypothesis and successive iterations, then interviews with experts helped in the assessment of the ontology as feedback reached saturation. Lastly, an exploratory case study was done to validate the ontology and instantiation assisted in checking the real-world applicability of the ontology.

3.2. Research Question

After reviewing the literature, the researcher realised that there are several perspectives and standpoints in social entrepreneurship that could be consolidated to form a novel framework. Thus, the following research question emerged from the literature review:

- How can business model ontology be extended, so that it covers the social business perspectives to be used by the social entrepreneur in the process of development of the social business model?

3.3. Research Design

As the intent of this study is to build a new framework for modelling a social business by extending the underlying ontology of business model canvas, design science approach was used to conduct the research.

3.3.1. Design Science Approach

Design Science is an indispensable “problem-solving paradigm” (Hevner, March, Park, & Ram, 2004, p. 76). “It seeks to create innovations that define the ideas, practices, technical capabilities, and products through which the analysis, design, implementation, and use of information systems can be effectively and efficiently accomplished” (Hevner, March, Park, & Ram, 2004, p. 76). The design science approach to research consists of 2 design processes (build and evaluate) and 4 design artifacts (constructs, models, methods, and instantiations) (Hevner et al., 2004).

Design as a process (sequence of actions) shows the environment as it is acted on. While, as a product (artifact) it describes an environment as it is perceived (artifact) (Hevner et al., 2004). This dual viewpoint of design enables it to flexibly transit from one perspective to another, the process to the artifact, and serves as an issue resolving archetype. “The design process is a sequence of expert activities that produces an innovative product (i.e., the design artifact)” (Hevner et al., 2004, p. 78). An assessment of the artifact gives richer knowledge and clearer meaning of the issues which facilitates the refinement of the design product and the process. This is a repetitive loop of building-assessing which results in the generation of ultimate design product and requires the researcher to improve the design process as well as design artifact (Hevner et al., 2004).

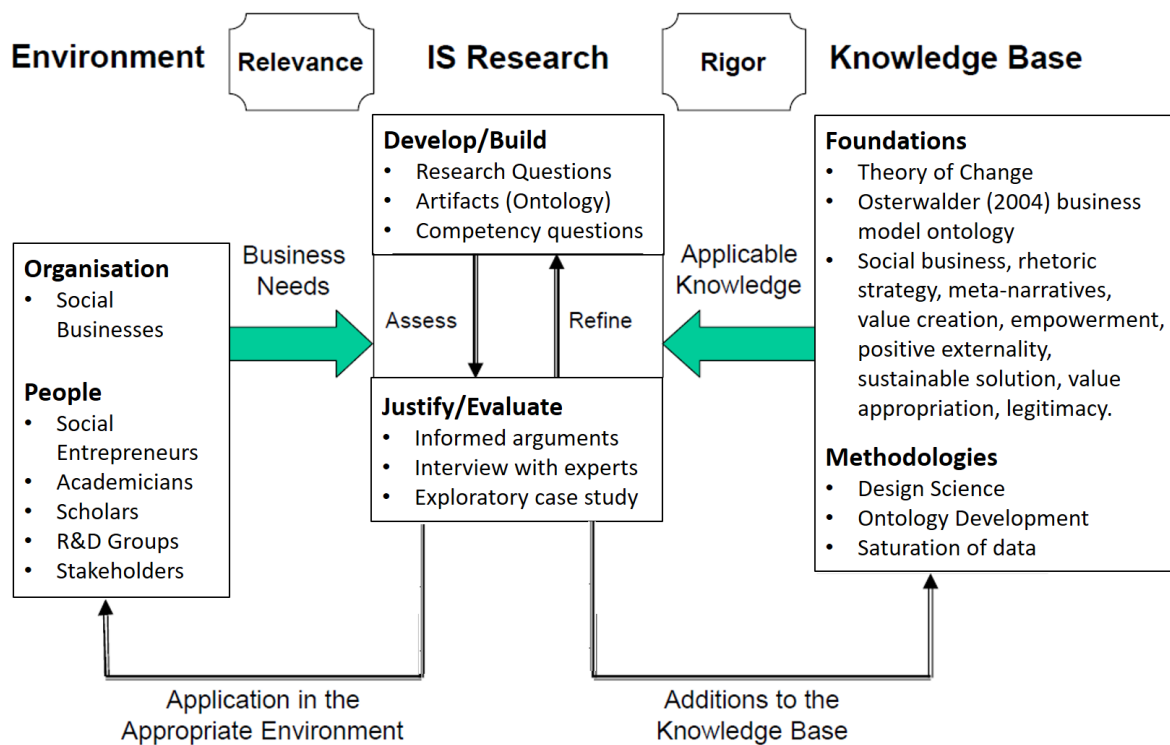


Figure 1. Framework for Understanding Design Science Approach *Note. Adapted from Design Science in Information Systems Research (p. 80), by A.R. Hevner, S.T. March, P. Jinsoo, and R. Sudha, 2004.*

Figure 1 above illustrates the manner of employing design science approach in this study. It comprises two main stages which are as follows:

- **Ontology Development (building an artifact):** The ontology was initially developed based on the articles read during the review of the literature and to answer the research question. Next, some new concepts were added as discussion emerged inside the research team. The introduction of the additional concepts was supported with informed arguments from the literature. The ontology development went through several iterations to get a refined version. UML (Unified Modelling Language) was used as a construct to build the ontology as it is intuitive and helps in the systematic enumeration of processes (Rumbaugh, Jacobson, & Booch, 2007).
- **Validation of the Ontology (evaluating the artifact):**
 - Well-known academicians, experts, and book authors in the field of social entrepreneurship in Portugal have been interviewed to evaluate the artifact built. Major feedbacks were received from the first interview that lead to a further improved version and revealed itself as robust and stable in the following interviews. The second and third interviewee found the ontology complete as well as interesting and provided only minor suggestions. ANNEX B provides the details of the interviewees.
 - Data saturation was reached with the second interview as there was not much information to be added. Moreover, the interviewees gave positive and encouraging feedbacks about the work that had been developed. “Data saturation is reached when there is enough information to replicate the study ... the ability to obtain additional new information has been attained ... further coding is no longer feasible” (Fusch & Ness, 2015, p. 1408). It can be said that

this thesis has enough information for replication of the study. Fusch & Ness (2015) suggest that interview method could also be used to saturate data in a qualitative study and the questionnaire for the interviews should be organized to enable inquiring from different interviewees the same questions. This study utilised the interview method with a structured semi-closed questionnaire to obtain substantive information.

- “Yin (1994) explains that case study research is most likely to be appropriate for how and why questions because these deal with operational links needing to be traced over time, rather than mere frequencies of incidence” (Dubé & Paré, 2003, p. 607). Case study method was adopted to make this study complete and thorough. Case studies usually benefit from the already developed theoretical propositions which in this study is in the form of ontology (Verner & Abdullah, 2012). Due to the investigative nature of this research, exploratory case study method was applied for validation. Exploratory research requires using cases from the field of research itself (social entrepreneurship) because the context is vital in creating the theory or artifacts (Verner & Abdullah, 2012). Bharat Calling is an excellent example of social entrepreneurship representing different aspects of the field and is, thus, a suitable case study for this research. It also shows that the ontology constructed in this research is applicable to different social enterprises irrespective of their location (Portugal or India). Additionally, the instantiation of the ontology displayed its real-life applicability.

3.3.2. Building an Ontology

An ontology is “... explicit formal specifications of the terms in the domain and relations among them (Gruber 1993)” (Noy & McGuinness, 2001, p. 1). An ontology is usually built to share a general understanding of a domain, to utilise and analyse existing body of knowledge in a field, and to isolate domain knowledge from practical information (Noy & McGuinness, 2001). After reviewing the literature, it was realised that there is a lack of an integrated model for social businesses. Therefore, by extending the business model ontology, by Osterwalder (2004), to social businesses, the researcher attempts to develop a better understanding of the social business models for academicians as well as practitioners. Table 2 below describes the specifications of the ontology built in this research.

Table 2. Ontology Requirements Specifications Template *Note. Adapted from How to Write and Use the Ontology Requirements Specification Document (p. 970), by M.C. Suárez-Figueroa, A. Gómez-Pérez, and B. Villazón-Terrazas, 2009, Madrid.*

Ontology Requirements Specifications (ORS)	
Identify purpose	To enable the modelling of social business models.
Identify scope	The scope of this ontology is the extension of the Business Model Ontology proposed by Osterwalder (2004) so that it is able to cope with the Social Business Models and, especially, the Social business Value Proposition.
Identify Implementation Language	The Unified Modelling Language is a formal tool for representing ontologies and is a subset of the Object Management Group’s Unified Modelling Language (UML) (S. Cranefield, Haustein, & Purvis, 2001).

Identify intended end-users	User 1: Social entrepreneurs User 2: Academicians doing researcher in social entrepreneurship. User 3: Social entrepreneurship scholars User 4: R&D groups	
Identify intended uses	Use 1: Developing Social Business Models. Use 2: Understanding the concept of Social Business. Use 3: Structuring a conceptual reference for organizing academic curriculum activities.	
Identify requirements	<u>Non-functional requirements</u> The terminology to be used in the ontology are as follows: theory of change, social business value proposition, starting situation, strands of action, intended outputs, steps of change, intended outcomes, negative influence, negative impact, ability to pay, ecological footprint, trust, transparency, beneficiary, value proposition, positive externality, empowerment, sustainable solution, value creation, stakeholder interface, customer interface, stakeholder, impact investor, government, community, impact payer, venture philanthropist, client, cooperative member, customer, employee, recipient, supplier, entwinement, relationship, relational, transactional, donor-recipient, no relation, resources, social capital, and rhetoric strategy.	<u>Functional requirements</u> CQ1. Is the Social Business Value Proposition Ontology extending the business model ontology so that it covers all the social business perspectives? CQ2. Are trust and transparency embedded in the Social Business Value Proposition? CQ3. Is the Ontology allowing the identification of the knowledge domains present in the Social Business? CQ4. Is the Ontology describing the outcomes of the social endeavour? CQ5. Is the Ontology describing the process through which the social venture will achieve the desired outcomes? CQ6. Is the Ontology picturing all possible stakeholders that may play a role in the social endeavour? CQ7. Is the ontology describing the different levels of entwinement which stakeholders may have with the social business organisation? CQ8. Are the social meta-narratives perspectives, as well as their impact, integrated into the business model ontology extension?

Philosophically, ontology is about the structure and order of real-life. According to Gubert, ontology is a method of representing an abstract and simple understanding of the real world through an overt description (Holsapple & Joshi, 2002). Holsapple & Joshi (2002) list 5 approaches to ontological design – induction, synthesis, deduction, inspiration and collaboration – which can be implemented in designing or modifying an ontology (Holsapple & Joshi, 2002). In this research, following approaches of ontological designing have been used:

- Inspirational approach was used as it helps in answering that “why an ontology is needed” (Holsapple & Joshi, 2002, p. 44) and uses researcher’s creativity in developing

the ontology. Hence, based on researcher's innovativeness and opinions in the studied domain, an ontology was built and its necessity was explained for this study.

- Collaborative approach has been used to design the ontology as it is a combined endeavour that reflects perspectives and experience of people who are willing to cooperate to develop it (Holsapple & Joshi, 2002). If varied contributions are made to the ontology, the probability of the acceptance of the domain increases and the content turns out to be refined. However, to keep a stable direction of the design process, the researcher needs to be careful and avoid involvement of too many people (Holsapple & Joshi, 2002). The initially developed ontology, in this study, went through a number of iterations based on various feedbacks from academicians and experts resulting in dwindling objections of the collaborators to finally reach a consensus.

3.4. Conclusion

This chapter described the methodology used in this research and explained the reasoning for choosing a particular approach for this study. In the next chapter, the researcher proposes and discusses the extension of the business model ontology through top-level ontology for social business value proposition and sub-ontology for value proposition, stakeholder interface, and resources.

4. PROPOSING EXTENSION OF THE BUSINESS MODEL ONTOLOGY FOR SOCIAL BUSINESSES

This chapter describes the theory of change and discusses top-level ontology for social business value proposition that enumerate how a social enterprise seeks to achieve change in society. Next, the chapter explains the sub-ontology for value proposition, stakeholder interface, and resources that extend the business model ontology by Osterwalder (2004) to social businesses.

4.1. Theory of Change

Social entrepreneurship is about solving the issues, that usually government and private sector fail to resolve, by changing or reforming societal and/or economic systems (Mair, 2010). “The key to social entrepreneurship is therefore an explicit or implicit theory of change. This theory of change is manifested in strategies, tactics and the (business) model, i.e., the configuration of resources and activities” (Mair, 2010, p. 5).

Theory of Change (ToC) has been used in this research to explain the reforms that a social business aspires to achieve. ToC, in this study, helps in unravelling the effects of different value propositions on the business model and on the beneficiaries of a social enterprise. The literature review was carried out to find the gap in the existing body of knowledge, which is, lack of a unified framework that combines different positions and perspectives in social businesses. Review of Literature also enabled the formation of initial ontology by interlinking different viewpoints and concepts. Thus, Theory of Change provided a theoretical context to the initially formed ontology. ToC articulates the reforms that a social business envisages, from its starting point to intended outcomes, as a consequence of its value proposition(s) and target beneficiaries. Therefore, this chapter first explains the theory of change and then describes its adaptation in this study.

A ToC is “A systematic and cumulative study of the links between activities, outcomes and context of the initiative (Fullbright-Anderson, Kubisch and Connell, 1998, p. 16)” (Laing & Todd, 2015, p. 3). ToC expresses the fundamental principles and norms that are implied for moulding a strategy and are vital for creating change and betterment (International Network on Strategic Philanthropy, 2005). It articulates the beliefs about the target group’s needs and the actions required to fulfil those needs. ToC establishes a framework for linking the target population, the plan to be implemented and the real-life consequences in view of the connections between the organisation’s mission to its strategies and results (International Network on Strategic Philanthropy, 2005).

Theory of change is a theoretical method to plan, execute or assess change at different levels (personal or institutional) with the supposition that an act is meaningful (Laing & Todd, 2015). It considers the context to enumerate the intended outcomes through certain planned activities and influences the style of thinking of the participants (Laing & Todd, 2015). ToC can be implemented using varied methods, but four crucial ways of developing it for a research or a program are Deductive Model, Inductive Model, Mental Model, and Collaborative Model (Laing & Todd, 2015). In this study, Collaborative Model has been applied because with this approach “... a theory of change is co-created through collaboration between academic expertise (inputting evidence from existing research) and practice expertise (where stakeholders outline their view of how things work)” (Laing & Todd, 2015, p. 4).

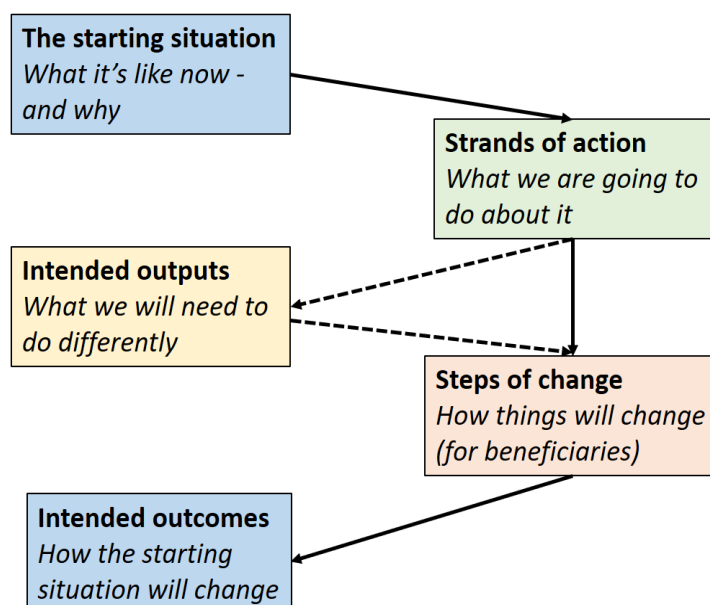


Figure 2. Characteristics of a Theory of Change *Reproduced from “Theory-based Methodology: Using theories of change for development, research and evaluation”, by Laing, K. and Todd, L. (eds) (2015), p. 4.*

Some of the benefits of using ToC are that it facilitates efficient planning, shows loopholes in the implementation process, prevents from losing focus on results, challenges suppositions, enable consensus, and incorporates reforms by being flexible enough where required (Laing & Todd, 2015). ToC can be the most suitable method to assess a program if the baseline data doesn't exist, anticipated results may outlast the program or results are difficult to state. Figure 1 (Characteristics of a Theory of Change) above shows the different stages in applying Theory of Change to a program: exploring the actual context of a program for its execution, starting situation, dangers and opportunities that may affect the program, actions to be performed and anticipated steps of change.

4.1.1. 'Top Level Ontology for Social Business Value Proposition

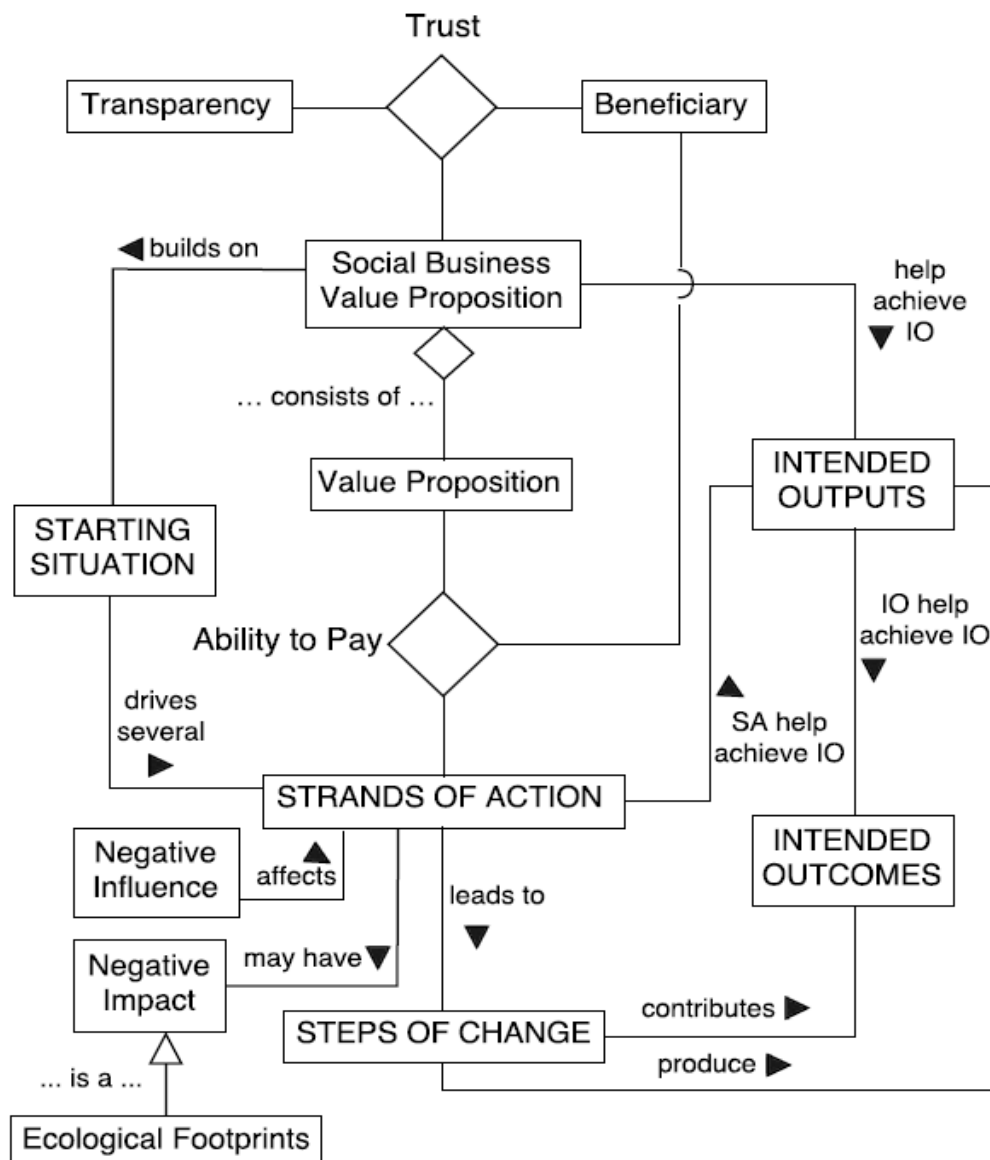


Figure 3. Top Level Ontology for Social Business Value Proposition

Figure 3 above is a proposed hypothesis of social business's strategy for achieving the targeted social changes that are sustainable and may lead to the business becoming obsolete. It shows how ToC has been used in this research to explain the impact of different value propositions on the business model and target beneficiaries of a social venture. In the next paragraphs, the researcher has discussed the interconnections hypothesised among different concepts of figure 3 (Top Level Ontology for Social Business Value Proposition) and how ToC along with these concepts can influence the strategy of a social business to achieve the targeted change/reforms. Tables 3-14 in ANNEX A (p. 69-72) define all the terms in this ontology and their inter-relation.

Ternary Association Trust relates Transparency in a social organisation, to its Beneficiaries, and its Social Business Value Proposition. Transparency in an organisation helps in building Trust of the target Beneficiaries to deliver the Social Business Value Proposition. In return, Social Business Value Proposition *builds on* the Starting Situation of an organisation that *drives*

*several Strands of Action. Social Business Value Proposition is an aggregation of different Value Propositions and it also helps in achieving Intended Outcomes. Another ternary association is Ability to Pay that relates Value Proposition of an organisation, its Beneficiaries and Strands of Action. Ability to Pay (financially) of a Beneficiary influences the Value Proposition of an organisation and affects the Strands of Action. Moreover, Strands of Action *leads to* Steps of Change and helps *achieve* Intended Outputs. Steps of Change *contributes to* Intended Outcomes and *produce* Intended Outputs. Intended Outputs *help achieve* Intended Outcomes. Negative Influence *affects* the Strands of Action and Strands of Action *may have* Negative Impact. Also, Ecological Footprints is a Negative Impact.*

Trust is an essential element in forming networks in society and networking is a crucial factor to become a successful entrepreneur (Awaworyi Churchill, 2017). Usually, individuals network with those who can be trusted; if trust is missing or is insufficient, then social networking (and subsequently social capital) is diluted (Awaworyi Churchill, 2017). “A high level of joint dependence is characterised by trust and reciprocity between actors and will improve the resource flow for and value creation of both actors in the relationship” (Vestrum & Rasmussen, 2013, p. 287).

This study hypothesises that trust is an essential requirement to work with the beneficiaries and hence it will also impact the social business value proposition. Zacharakis, Erikson, and George (2010) state that trust is important in cooperative relations and is considered as an optimistic expectation about the associate. The manner of forming and practising relational norms affects each beneficiary’s faith in the organisation and one another (Zacharakis, Erikson, & George, 2010). “The trust of the general public is a crucial asset for social enterprise, important in enabling them to deliver on their social change goals” (Ruebottom, 2013, p. 101).

Entrepreneurs need information to begin their organisation and to continue their business. Since entrepreneurs’ associations are based on trust, they can get important information from experienced others. Also, being in a trustworthy association makes their way to information easier and reliable (Awaworyi Churchill, 2017). Therefore, trust can affect the social business value proposition of a social venture as trust leads to access to valuable information and key networks.

Additionally, transparency facilitates trust between the social venture and its beneficiary while creating accountability inside and outside of the organisation (Ashoka, 2014). “In the era of social media and 24-hour news cycles, if you don’t share you’re behind the curve of changing consumer demand. The only way to get ahead of your customers is to embrace, understand and use openness” (Ashoka, 2014, para. 8).

Therefore, it is evident that Trust forms an association with Beneficiary, Transparency and Social Business Value Proposition. When trust is built and transparency is created in a social venture, the relationship of the organisation with its beneficiary improves and it further supports or strengthens its Social Business Value Proposition.

This study also proposes that ability to pay of a beneficiary will impact the value proposition, strands of action and the beneficiaries themselves. Per Blount and Nunley (2014), social businesses that emphasise on serving people who do not have the ability to pay, for the services or products they are provided, are more beneficial to a society than a traditional business. Considering such differences while creating a social venture also helps in deciding the strategy and making choices for the business (Blount & Nunley, 2014).

While Mair (2010) states that having financial sustainability is an important aspect of social entrepreneurship but not a sufficient measure. In certain cases, the beneficiary's ability to pay becomes a detrimental factor for the financial sustainability of the organisation (Mair, 2010). But the primary objective of a social enterprise is bringing reforms in the society and for this, the entrepreneur might need to make new strategies and employ different tactics (Mair, 2010). She then adds that:

Also the choice of the organizational form is more a reflection of the particular problem at hand rather than a paradigm issue. In other words, for-profit and not-for-profit are seen not as a defining characteristic of social entrepreneurship but as a specific choice to be made depending on the overall model to address social needs. As mentioned before, certain needs in certain contexts lead more easily to for-profit models when the willingness and ability to pay exists. (Mair, 2010, p. 7)

Hence, Ability to Pay of the Beneficiary affects the Social Business Value Proposition since the incapability of any beneficiary to financially contribute to the organisation will completely affect the business strategy of a social venture.

For this research, Negative Influence has been defined as follows: a result of the skewed power dynamics between funding agencies and social entrepreneurs that have an unfavourable effect on the social business model. It may result in the alteration of the strands of action and subsequently the intended outcomes and the intended outputs. "Investors have won, and their dealings with the entrepreneur class now look far more like the dealings between management and labour (with overtones of parent/child and teacher/student)" (Rao, 2012, para. 1).

Negative impact is hypothesised as adverse effects or negative externalities (uncompensated third-party effects) that may result from the actions of social enterprises. Since no organisation can operate in a way that would create only positive impacts. Negative Impact is a result of strands of actions and Ecological Footprint is a Negative Impact. The researcher was hardly able to find any literature related to the negative impact of social ventures' activities and it seems that this topic remains relatively untouched in the field of social businesses. It is important for a social enterprise to know or forecast the negative impacts that may result from the organisation's functioning in order to reduce those negative impacts as soon as discovered.

4.2. Business Model Ontology and its Extension

After using ToC to explain the reforms that a social venture aims to attain, the researcher discusses the various concepts, from social entrepreneurship literature, that were integrated into three sub-ontologies and are an extension of the business model ontology to social businesses.

According to Osterwalder (2004), the business model ontology was created to identify and link the main concepts in the discipline of business studies and provide exact definitions of those concepts and their interconnections. Business model ontology was built to be used as management tool as well as to illustrate and simplify the business logic of various firms. "... Business Model Canvas is a simple graphical template describing nine essential components...

The individual elements prompt consideration of a business' full scope, while the layout encourages thought about how the pieces fit together” (Greenwald, 2012, para. 2).

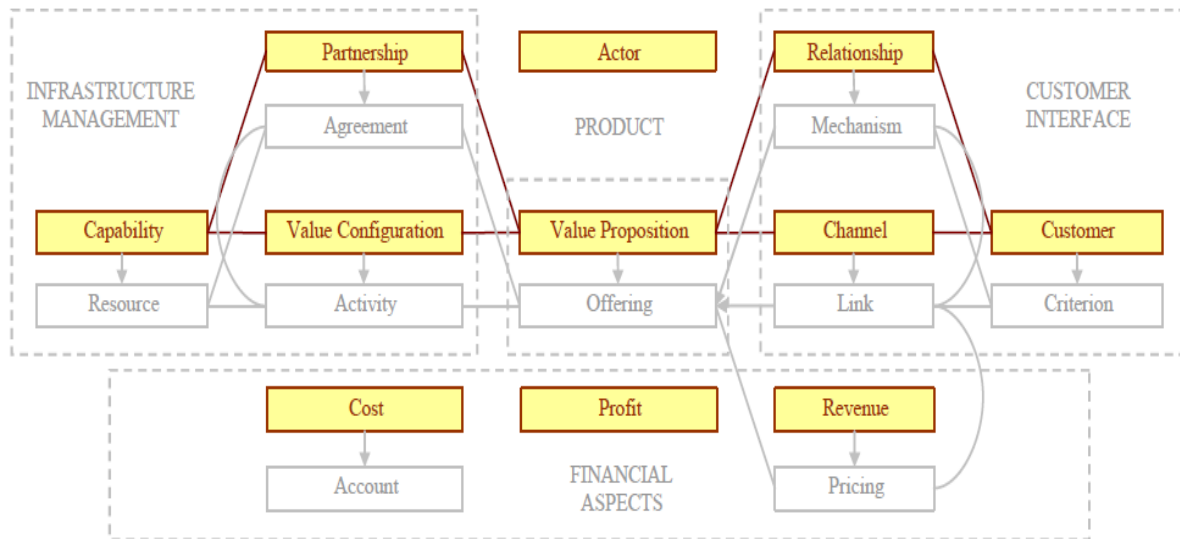


Figure 4. Overview of Business Model Ontology *Reproduced from “The Business Model Ontology a Proposition in a Design Science Approach”, by A. Osterwalder, 2004, p. 44.*

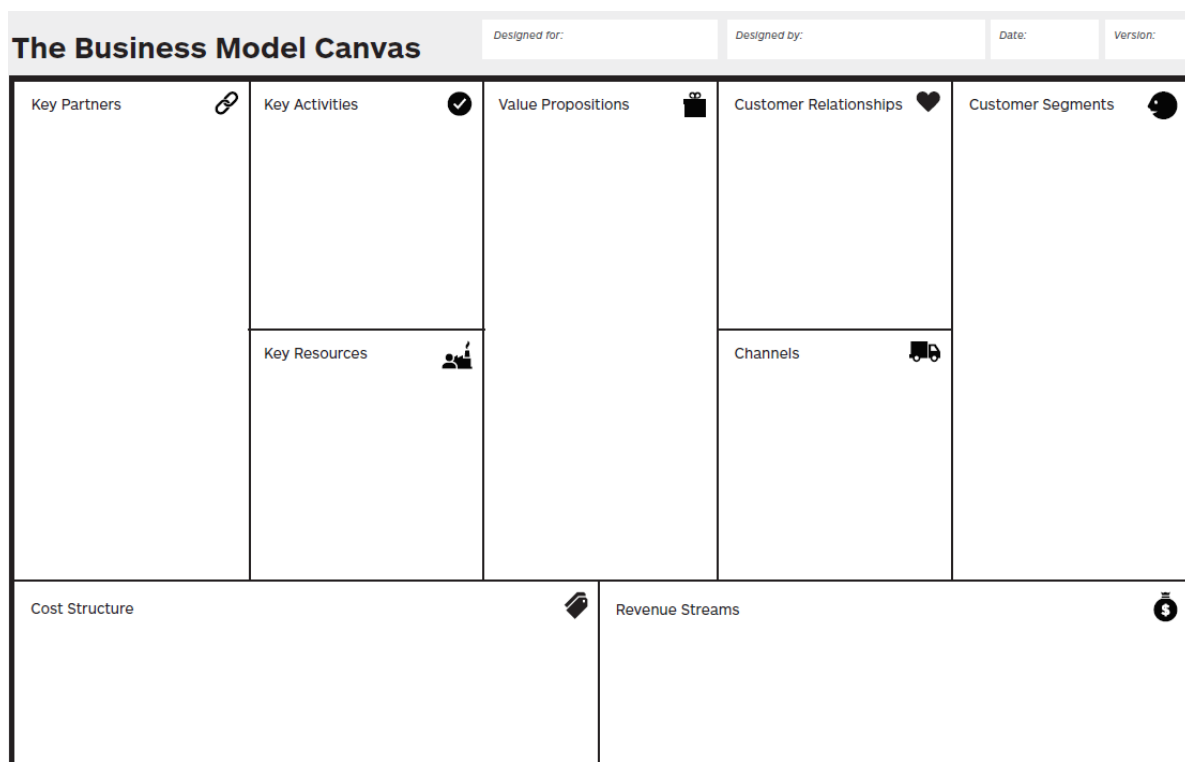


Figure 5. Business Model Canvas *Reproduced from (“Strategyzer | Business Model Canvas,” n.d.). Used under a Creative Commons Attributions 1.0 (<https://creativecommons.org/licenses/by/1.0/>).*

Figure 4 (Overview of Business Model Ontology) above shows the overview of the business model ontology while figure 5 (Business Model Canvas) shows the simplified and easy to use business model canvas.

4.2.1. Sub-Ontology for Value Proposition

Based on the literature review, the researcher realised that certain perspectives and concepts could be integrated together into the existing business model to make it more suitable for social businesses. Thus, Figure 6 (Sub-Ontology for Value Proposition), 7 (Sub-Ontology for Stakeholder Interface), and 8 (Sub-Ontology for Resources) represent the integration of particular concepts and viewpoints to the original blocks of the business model canvas. Besides defining each newly added concept, the relationship among the newly added concepts and the original concept has also been explained below.

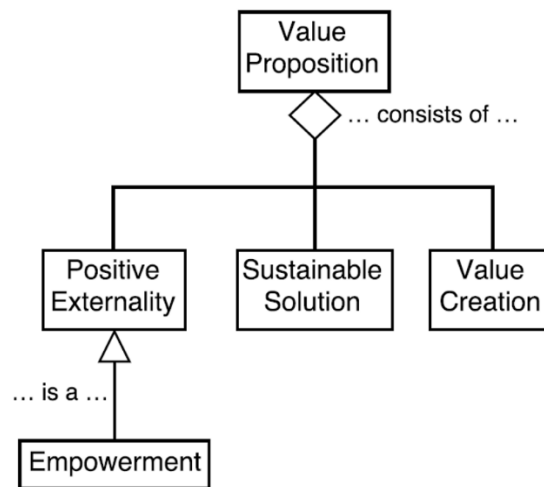


Figure 6. Sub-Ontology for Value Proposition

Tables 15-18 in ANNEX A (p. 72 and p. 73) define all the terms in this sub-ontology and their inter-relation. The researcher has hypothesised in figure 6 (Sub-Ontology for Value Proposition) above that value proposition consists of value creation, sustainable solution and positive externality. Additionally, empowerment is a positive externality and by default a part of the value proposition. This interconnection has been explained in detail below.

“Externalities refers to situations when the effect of production or consumption of goods and services imposes costs or benefits on others which are not reflected in the prices charged for the goods and services being provided” (“OECD Glossary of Statistical Terms - Externalities - OECD Definition,” 2003, para. 1). They are the unintended outcomes that result from the economic activities of firms, individuals or households, and affects others’ prospects of consumption as well as production. Externalities are unaccounted for the costs incurred by an economic activity and impact public which is not directly engaged in transactions (Thomas Helbling, 2010).

Externalities can be categorised into positive and negative based on their impact on society. Helbling (2010) talks about the environmental pollution to explain the concept of negative externality. A firm or an individual decide their actions based only on direct costs and returns from the production or consumption activities respectively. They do not think about the indirect costs like pollution that result from their actions and harms others. Here the social costs of producing or consuming are higher than the private costs and the producer or the consumer do

not bear these indirect costs (Thomas Helbling, 2010). Some of the indirect costs of pollution are deteriorated life quality and increased the cost of healthcare which are the negative externalities that society must bear.

Contrary to negative externalities, positive externalities create higher social returns than private returns. A typical example of a positive externality is the benefits given to society by research and development activities of a firm as it expands the contemporary knowledge body which results in subsequent discoveries (Thomas Helbling, 2010). Social entrepreneurs typically focus on enhancing neglected positive externalities which have been left untouched by the government because of lack of resources, capabilities or motivations (Santos, 2009). Whereas most of the private firms are uninterested in working on neglected positive externalities because it doesn't match with their goal of value appropriation¹ rather than value creation (Santos, 2009).

Therefore, it can be said that the social enterprises attend to neglected positive externalities by creating innovative economic activities as a solution (Santos, 2009). This further results in accruing more positive externalities for it may attract government's attention and consequently, the enterprise may receive government support in various forms. Subsequently, it catalyses the scaling-up and replication of the enterprise's activities and thus reduces the market failure (Santos, 2009). Hence, the value proposition of a social enterprise consists of positive externality since enhancing neglected positive externality is an offering, through product or service, of a social enterprise to its customers (beneficiary).

'Empowerment' is a crucial part of the Value proposition of a social entrepreneur's business model. A social entrepreneur focuses on value creation and operates on the rationale of empowerment. This is contrary to a commercial entrepreneur who focuses on value appropriation and operates on the rationale of control (Santos, 2009). The main concern of social entrepreneurs is increasing the effectiveness of the entire system of activities and not just the organisation. They focus on the empowerment of beneficiaries, customers or stakeholders who are not the actors within the organisation. Empowering people enables in providing a sustainable solution as people themselves become essential elements of the solution that may lead to the ventures getting obsolete. (Santos, 2009).

Typically, social entrepreneurship is resource constrained owing to the low focus on value appropriation and due to society's lack of awareness about the resulting positive externalities. However, the objective of social entrepreneurship is to solve social issues. Consequently, the most suitable way to operate is by encompassing structures and mechanisms that would empower the beneficiaries and stakeholders and decrease their dependence on the organisation which would eventually result in the exit of the organisation (Santos, 2009).

Social entrepreneurs believe that empowerment of people can make them instrumental in solving problems and enabling their welfare:

A striking example of a solution built on the logic of empowerment is the Barefoot

College established in India in 1971 by the social entrepreneur Bunker Roy (Elkington

¹ Following definitions of value appropriation was used in this research: "Value appropriation from an activity happens when the focal actor is able to capture a portion of the value created by the activity (Mizik & Jacobson, 2003)" (Santos, 2009). It is mainly concerned with extracting profits and increases in stock return. There is usually a trade-off in firms in either increasing focusing on value creation or value appropriation (Santos, 2009).

et al., 2008). The founder believes that we have “a gross underestimation of people’s infinite capacity to identify and solve their own problems with their own creativity and skills, and to depend on each other in tackling problems. What I learned is that empowerment is about developing that capacity to solve problems, to make choices, and to have the confidence to act on them” (Roy & Hartigan, 2009). (Santos, 2009, p. 38)

Consequently, the researcher understands that Empowerment is not only a Positive Externality but also an essential offering of a social enterprise because elements of empowerment are rooted in the business model of social enterprises as these businesses do not operate to control.

The value proposition of a social enterprise consists of a sustainable solution for the reason that the primary objective of the social organisations is to develop solutions that are ‘sustainable’ and ultimately make the ventures obsolete (Bacq & Lumpkin, 2014). Also, social enterprises usually function in an unorthodox fashion for problem resolution is their key focus and not the creation of the market. They may take support from different social institutions (like markets, community-based resources and government) in a unique combination to achieve the vision of developing sustainable solutions (Santos, 2009).

Per Santos (2009), social entrepreneurs are focussed on attaining sustainable solutions for resolving problems, in contrast to securing sustainable advantage for the growth of their firms. Targeting sustainable advantage is the purpose of the firms that are motivated by value appropriation as they either want to maintain their ability of value appropriation or proliferate it. This concept of sustainable advantage forms the basis of the theory of the firm which states that organisations are the chief unit of analysis because it is the principal mean for value appropriation and control over resources (Santos, 2009). On the other hand, for social enterprises, the corollary to this theory would be that enterprises may not be the chief unit of analysis as social enterprises target at achieving sustainable solutions (defined at system’s level) which are the locus of value creation (Santos, 2009).

Social entrepreneurs develop sustainable reforms which are also a parameter to evaluate the performance of their enterprise. Whereas normal businesses evaluate their success based on the financial returns, that is, selling of goods or services (Ebrashi, 2013). For social enterprises, success means creating sustainable social impact in the form of long-lasting positive change in the community (Ebrashi, 2013).

In their paper “The Praxis of Systems Thinking for Concurrent Design Space and Business Strategy Exploration”, Dzombak, Mehta, Mehta, & Bilén (2013) mention:

The ultimate objective for the ESpot Canvas is to develop “sustainable” projects. Sustainability, in this regard, refers to projects that are technologically appropriate, environmentally benign, socially acceptable, and economically sustainable. Projects

should leverage resources that are affordable and accessible to the community where the venture will be implemented. (Dzombak, Mehta, Mehta, & Bilén, 2013, p. 4)

So it can be seen that ‘sustainability of the solution’ is an integral part of the value proposition of even a technological social venture. The stewardship theory helps in strengthening the point that sustainable solution is an offering of a social enterprise. It gives an understanding of social ventures aiming for sustainable solutions:

Stewardship theory is based on the view that people are intrinsically motivated to act on behalf of those who have vested them with responsibility (Davis, Schoorman, and Donaldson 1997). As a result, ‘steward’ decision-makers are driven by collective interests, self-actualization and altruism (Davis, Schoorman, and Donaldson 1997; Zahra 2003), adopt an ‘involvement-oriented management philosophy’, and prioritize organizational, rather than personal, objectives (Short, Moss, and Lumpkin 2009, 176). Consequently, steward decision-makers are more likely to orient their actions toward the long run rather than favouring short-term decisions (Davis, Schoorman, and Donaldson 1997). (Bacq & Lumpkin, 2014, p. 280)

Thus, it provides a theoretical perspective that explains the long-term social impact created by social ventures and their tendency to develop enduring outcomes. Hence, the social ventures stress on sustainable solutions rather than sustainable organisation and restrain from making short-term decisions (Bacq & Lumpkin, 2014).

Next, it is hypothesised that value proposition also consists of value creation in case of social entrepreneurship. And to understand the concept of value creation in society, one needs to remind that the private value (earned by consumers and producers) is gained when there is a surplus after the subtraction of costs incurred from the prices. Like private value is created at the transactional level, the social value can also be formed when an offering’s overall consumption creates positive externalities or advantages for the community or society that weren’t directly involved in the transaction (Newbert & Hill, 2014).

“Social entrepreneurship creates social value through acting as a change agent and/or providing social innovation by relying on a sustainable business model (Acs et al., 2013)” (Sinkovics, Sinkovics, & Yamin, 2014, p. 693). This is the major difference between a social enterprise and a commercial enterprise that the former works toward the value creation while the latter functions for value appropriation. Thus, social entrepreneurs focus on value creation and it influences their decision of selecting partners and investors (Santos, 2009).

If value creation is considered as a significant element of an enterprise’s business model, it will come out organically in the form of positive externalities (Sinkovics, Sinkovics, & Yamin, 2014). Also, an enterprise whose primary goal is value creation will try to mark the prices of

its products or services such that it facilitates maximum benefits for its beneficiaries (Santos, 2009). Therefore, the value creation is the part of the value proposition of a social enterprise as it is the elementary offering that an enterprise would give to its beneficiaries.

Different authors and scholars argue that value creation is the primary characteristic of a social enterprise and not value appropriation. “Thus, we advocate a definition of social enterprise expressly stating that social enterprise has the primary mission of seeking value creation for one or more stakeholder groups besides shareholders or owners of the organization” (Blount & Nunley, 2014, p. 303). Hence, it is evident that value creation for stakeholders is a characteristic of social ventures, so it is a part of the value proposition that a social venture offers.

4.2.2. Sub-Ontology for Stakeholder Interface

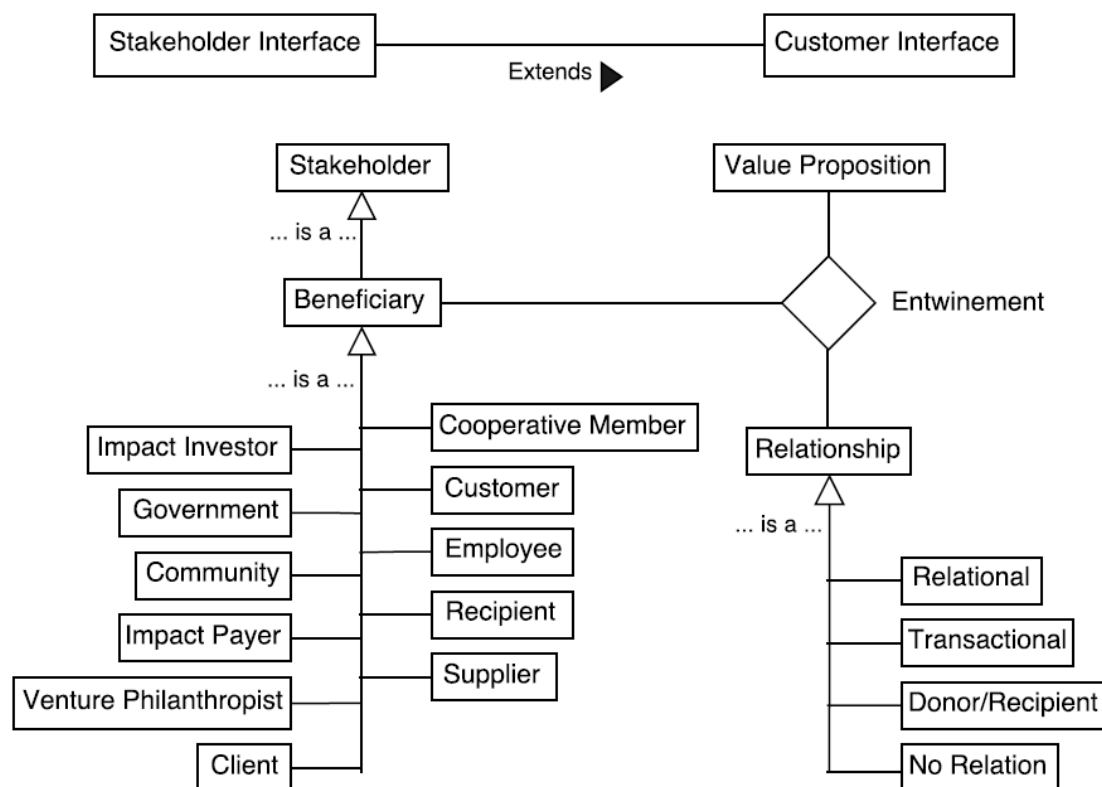


Figure 7. Sub-Ontology for Stakeholder Interface

Figure 7 (Sub-Ontology for Stakeholder Interface) above illustrates the extension of Osterwalder (2004) customer interface to stakeholder interface for making it suitable for social businesses. Here, the researcher proposes the following:

- stakeholder interface extends customer interface;
- the beneficiary is a stakeholder;
- cooperative member, customer, employee, recipient, supplier, impact investor, government, community, impact payer, venture philanthropist, and client are (.is a..) beneficiary;
- entwinement is an association among value proposition, relationship, and beneficiary;
- no relation, donor/recipient, transactional, and relational are (.is a..) relationship.

Tables 19-37 in ANNEX A (p. 73-77) define all the terms in this sub-ontology and their inter-relation.

The Stakeholders Interface gives an extensive list of beneficiary and defines the type of relationship that they may hold with the social venture. The Customer Interface is itself a Stakeholders Interface that focuses specifically in describing how it provides value and to whom.

Stakeholders are “those who can affect or can be affected by the firm” (Fassin, 2008, p. 8). They are unique in the context of social organisations and help in comprehending the functioning of these organisations. Stakeholder groups are categorised based on their financial activities in an organisation, like employee, customer or supplier (Kennedy, 2016). “...within social enterprises it would follow that beneficiaries would be considered their own class of stakeholders. Under even the most stringent of interpretations of stakeholders, beneficiaries would be considered individuals who are affected by the social enterprise’s objectives” (Kennedy, 2016, p. 15).

A beneficiary can be regarded as a key stakeholder, irrespective of the position that it holds in its relation to the social venture, as it is an individual or a group that is impacted by the goals of an organisation. The stakeholders are usually grouped per the economic functions they serve in a social enterprise. Subsequently, beneficiaries would form a separate set of stakeholders (Kennedy, 2016).

Beneficiaries are thus the building blocks of a social venture as the mission and existence of an organisation is dependent on them. According to Kennedy (2016), a beneficiary can be a customer, supplier, employee, board member or anyone receiving free products and/or services from the social venture. The relationship between beneficiaries and venture depends on the design of the organisation’s structure and is typically decided at the ideation phase of the venture. Although this relationship model is the foundation for the venture’s functioning, yet it may change over a period (Kennedy, 2016). Therefore, as the offering (value proposition) of an organisation evolves, its set of beneficiaries may also change.

To further categorise the set of beneficiaries, it is important to understand the concept of “entwinement”. The author has explained entwinement as “... the mutual reliance and commitment between two parties, in these cases the enterprises and the individual beneficiaries they seek to serve” (Kennedy, 2016, p. 6). Entwinement represents the interdependent bonding of the beneficiaries and the firm that is affected by the following factors:

- proximity and location of the beneficiaries in the firm and its value chain;
- pattern, frequency and nature of interactions between - beneficiaries and the firm, and the beneficiaries and other stakeholders of the firm (Kennedy, 2016).

Entwinement increases as the position of the beneficiary becomes more proximate with the creation of value within the firm and as the enterprise increasingly recognizes the individual agency of beneficiaries and gives them more control over their engagement with the organization (Kennedy, 2016, p. 149).

Thus, the entwinement will also be affected by the value proposition of a social enterprise because depending on what the organisation is offering the involvement of different beneficiaries will vary according to their own interests.

The interaction pattern of the organisation and various beneficiaries helps in understanding the level of entwinement among the two. Hence on analysing different types of interactions, Kennedy (2016) grouped them into four relationship characterisation which is as follows:

- No Relationship - The firm and the beneficiary have no interaction;
- Donor/Recipient – Depending on its objectives and its target beneficiaries, the organisation decides to provide certain services, goods or money;
- Transactional - The organisation and the beneficiary participate in transaction(s) whose rules are determined by the organisation;
- Relational - The organisation works directly with beneficiaries and gives them training and guidance.

Kennedy (2016) further categorised the beneficiaries of a firm into six sets of beneficiary roles. The level of entwinement for each set of the beneficiary role is influenced by the relationship characterisation with the firm. The entwinement level ranges from no, low, moderate to high. Following are the different sets of beneficiaries depending on their role in the organisation:

- Cooperative member – This beneficiary is an internal stakeholder who is part of making decisions and contributes to revenue production. This group has a high entwinement level as they share a Relational relationship with the organisation (Kennedy, 2016).
- Customer – They are the external stakeholders in an organisation but essential for producing revenue. The beneficiary receives private value from the buying of product or service. They have a moderate entwinement level with the organisation as their relationship is majorly Transactional (especially when buying a product). This selling activity has social value as it is generally a tailored solution to fulfil the unaddressed need of the targeted beneficiaries. The product or service sold by the organisation are usually purchased or sold at a discounted price (Kennedy, 2016).
- Employee – “The goal of many of these enterprises is workforce development for a specific group of disadvantaged people and as a result the jobs are designed to be paid, temporary, training focused opportunities” (Kennedy, 2016, p. 69). Employees are internal stakeholders and essential for producing revenue in a venture. Since the relationship between employees and the organisation is mostly Relational, they have a high entwinement level (Kennedy, 2016).
- Recipient – Recipients are the beneficiaries who do not contribute at all to producing revenue in an organisation. This group has either no entwinement or low entwinement because they lie in the zone of No relationship or Donor/Recipient relationship respectively. (Kennedy, 2016).
- Suppliers – “These beneficiaries are external stakeholders who are core to the production processes of the enterprise. In these cases, beneficiaries produce a product that the enterprise then repackages and sells at a premium rate in the market” (Kennedy, 2016, p. 69). Suppliers are a beneficiary group with moderate entwinement level as their relationship with the organisation is Transactional (Kennedy, 2016).

Based on many iterations and validation through interviews of the concepts formed, the researcher has further categorised Beneficiary into Venture Philanthropist, Impact Investor, Impact Payer, Government, Community, and Client as the subcategories. Robb and Gandhi,

(2016) state that social entrepreneurial ventures (SEVs) function through several partnerships which composes various stakeholders like government bodies, other organisations, funding agencies, community members and clients served.

The researcher has added Venture Philanthropist and Impact Investor as the Beneficiary of a social enterprise and subsequently the Stakeholder since “New tools and ideas with roots in venture philanthropy, such as impact investing, are growing as innovative ways to build social value” (Grossman, Appleby, & Reimers, 2013, p. 1).

There is no universal definition of venture philanthropy, however, European Venture Philanthropy Association defines it as:

...an approach to charitable giving that applies venture capital principles, such as long-term investment and hands-on support, to the social economy. Venture philanthropists work in partnership with a wide range of organisations that have a clear social objective. These organisations may be charities, social enterprises or socially driven commercial businesses, with the precise organisational form subject to country-specific legal and cultural norms. (John, 2006, p. 10)

Venture Philanthropists are greatly concerned about evaluating the results and checking the accountability of a social enterprise. They also focus on increasing the efficiency of the organisation and scaling it up (Grossman et al., 2013). Besides, pumping money into a social enterprise, Venture Philanthropists are also highly engaged in the management of an enterprise for a long period of duration, infusing different skills (John, 2006). They are keen to provide support to social entrepreneurs with innovative and sustainable business models that could result into significant social transformations (Grossman et al., 2013).

Whereas, Impact investors are the ones who look forward to generating positive social results by investing in a social enterprise and obtain financial returns that may range from discount to market rates (Brest & Born, 2013). Since the financial return is a pre-condition of impact investors, they are inclined to take lesser risks and hence generally finance social ventures with an established record instead of start-ups (Grossman et al., 2013).

The Global Impact Investing Network (GIIN) defines impact investments as those that: aim to solve social or environmental challenges while generating financial profit. Impact investing includes investments that range from producing a return of principal capital (capital preservation) to offering market-rate or even market-beating financial returns. Although impact investing could be categorized as a type of ‘socially responsible investing,’ it contrasts with negative screening, which focuses primarily on avoiding investments in ‘bad’ or ‘harmful’ companies - impact investors actively seek

to place capital in businesses and funds that can harness the positive power of enterprise. (Shah, 2011, para. 11)

Furthermore, Impact Payer has been hypothesised as ‘someone willing to pay for the real (not expected) outcomes of a social impact venture and to internalise positive externalities’. Besides this, Client has been hypothesised as ‘a person who only uses the services/products but doesn't purchase it’. ‘Client has the ability or capacity to influence the buying decision’.

The government is a beneficiary because the social enterprises bridge the deficiencies in services of private and public sectors. “One key role that social entrepreneurs play is the creation of non-government organizations (NGOs) to fill institutional voids left by public institutions (Mair & Marti, 2009)” (Cohen & Munoz, 2015, p. 18). Whereas Government provides structural support to these social organisations. “Governments create and regulate the playing ground for innovation and entrepreneurship (Minniti, 2008) by exercising varying degrees of economic and political control to stimulate technological innovation in their jurisdictions (Mahmood & Rufin, 2005)” (Cohen & Munoz, 2015, p. 18).

Most of the governments give services based on the needs of the major population instead of providing customised services reflecting diverse needs of different communities (Jung, Jang, & Seo, 2016). The inability to provide customised services can be caused because of several constraints like limited resources, time and money. Thus, the non-profit or social enterprise come into the picture to fulfil the unmet needs of citizens (Jung, Jang, & Seo, 2016). “Social enterprise programs utilize the nonprofit sector as the deliverers of the government’s social policies and as agents of public programs, allowing the government to direct and expand social services without creating new agencies” (Jung, Jang, & Seo, 2016, p. 602). The Government supports social enterprises by providing funding, formulating favourable policies for the growth of social organisations, and professional training. “... provides an understanding of the government’s intention to help the nonprofit sector grow and to use non-profit organizations as agents of the government to provide government-driven social services” (Jung, Jang, & Seo, 2016, p. 613).

Next, Burkett (2013) helps in understanding how communities are beneficiaries of a social business. She defines social enterprise as organisations having a commercial, communal, cultural or environmental objective associated with public or community welfare.

... entrepreneurship research pertains to the way in which entrepreneurs are embedded in social systems (Jack & Anderson, 2002) and, more recently, in place (McKeever, et al., 2015). ... Shrivastava and Kennelly further suggest that PBEs may be more likely to develop ‘fields of care’ associated with place, which encourages them to act in ways that improve their local community through business activities. (Cohen & Munoz, 2015, p. 14)

Moreover, Bacq & Lumpkin (2014) state that social business ventures (SBVs) are converging structures of exchange which consist of ownership/support mechanisms, community, and

enterprise; wherein the achievements of SBVs is ascertained by efficiently harmonizing the needs and welfare of these 3 clusters of beneficiaries. Serving community members are the reason for the existence and creation of many SBVs and community's interests is considered while formulating strategies. In SBVs, community members are not only beneficiaries but also contributors to the organisation (Bacq & Lumpkin, 2014).

4.2.3. Sub-Ontology for Resources

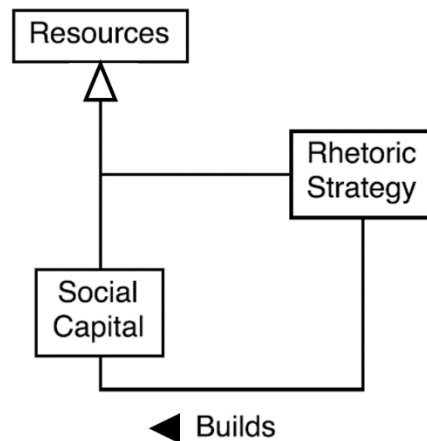


Figure 8. Sub-Ontology for Resources

Tables 38 and 39 in ANNEX A (p. 7777) define all the terms for figure 8 (Sub-Ontology for Resources) and their inter-relation. For this sub-ontology, the researcher proposes that rhetoric strategy builds social capital which is a resource since rhetoric facilitates in securing legitimacy for the organisation. This results in gaining trust, support and participation of stakeholders (also general public) which is crucial for new social ventures as it helps the venture to achieve the social objectives it aims for (Ruebottom, 2013). The social entrepreneurs that want to bring change to the existing practices of a community need to secure legitimacy, by using favourable meta-narratives, in the community as this legitimacy would be essential for gaining resources and social value (Ruebottom, 2013).

However, it is important to point out the definition of legitimacy first and then understand the significance of rhetoric for social enterprises in gaining legitimacy. The author has used Suchman's (1995) understanding of legitimacy: "a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions" (Kennedy, 2016, p. 18).

Here Ruebottom's paper, "The microstructures of rhetorical strategy in social entrepreneurship: Building legitimacy through heroes and villains", helps in finding out that how social enterprises establish their legitimacy for social change. Ruebottom particularly looks at the rhetoric carved by these organisations and the microstructure underlying the rhetorical strategy. The sets of vocabulary that were used in rhetoric to describe the protagonists, i.e. the organisations, and the antagonists, i.e. those that defied the change, could comprise sets of vocabulary that had a connection to cultural metanarratives. The vocabulary represents societal outlooks which are connected to fundamental beliefs and values and tap the ethical and cognitive legitimacies of the public. The cultural metanarratives thus create a comprehensive account that justifies the organisation's structure and gives power to them to face legitimacy challenge, solve a conflict or emphasise synergies and benefits (Ruebottom, 2013).

The paper also states that negative antagonists' creation juxtaposed with protagonists' theme, further highlighted the legitimacy and appropriateness of the protagonists' approach and outcomes. This is because there was an emphasis on the contrast between societal values and the status quo which if put together with the positive values of protagonists created a tension that could be resolved by the social change proposed by the organisation.

Meta-narratives were used to legitimise (and delegitimize) practices that lay outside of the existing institutional logic. Oakes et al. (1998) found that the identity of a non-profit organisation was changed using new vocabularies relating to the external institutional logic of markets. (Ruebottom, 2013, p. 100)

Without obtaining legitimacy in the social sphere of their functioning, social entrepreneurs may face various difficulties that would minimise their capacity to work towards their social goals. Effective entrepreneurs can present a comprehensive vision, manoeuvre rhetoric to problematize contemporary conditions, legitimise their solutions by defusing or diverging general views and encourage people to engage (Ruebottom, 2013). The analysis of different social enterprises' rhetoric in Ruebottom's paper showed that the social enterprises portray themselves as protagonists (using positive rhetoric tools) and those who encounter them as antagonists (using negative rhetoric tools).

He explicitly suggested that organisations sometimes gain legitimacy by manipulating rather than conforming to their environments, particularly to support the diffusion and adoption of new models of action. In these cases, organisations actively construct and promote new rationales and logics of social reality. However, Suchman ultimately saw this as an instrumental process aimed at aligning environmental factors with organisational ends: the focus is on shaping existing institutional material to an organisation's strategic needs rather than creating a new institutional space as a process of field building per se. (Nicholls, 2010, p. 615)

The rhetorical strategy has emerged as a vital tool for altering public views and bringing novel ideas in a community. Entrepreneurs create a unique combination of rhetoric by using the metanarratives that are common and comprehensible and mould them in favour of their situation (Ruebottom, 2013). "Institutional theory also acknowledges a cultural dimension in its analysis of the processes of legitimation, noting that organizations also represent theoretical constructs consequent upon, and defined by, existing cultural material and networks of social influence and communication" (Nicholls, 2010, p. 615).

Rhetorical strategy is not paid heed to while developing the capabilities of an organisation or planning its strategy. Thus, the researcher brings forward the point that Rhetoric could be a

crucial Resource for an organisation as it not only legitimises an organisation's actions but also provides it with the power to bargain and negotiate. Language is a chief and underestimated resource that could be enhanced by social entrepreneurs in their daily discourses to influence others and gain social capital.

Social enterprises that have usually limited resources could use Rhetoric to reinforce the positive externalities that result from the organisation's activities and thus strengthen the organisation's position and impact of its work. It is also important for the Stakeholders because this would increase their trust in the organisation, and encourage them to engage and/or become active participants.

The researcher now explains social capital which is a lifeline for social entrepreneurs and rhetoric strategy can help in increasing the social capital.

Social capital is defined by the OECD as networks together with shared norms, values and understandings that facilitate co-operation within or among groups. In this definition, we can think of networks as real-world links between groups or individuals... Sociologists sometimes speak of norms as society's unspoken and largely unquestioned rules... values – such as respect for people's safety and security... Put together, these networks and understandings engender trust and so enable people to work together. (Brian, 2007, p. 103)

Social capital can be categorised into 'bonding' and 'bridging'. Bonding social capital is the explorative lens to understand the effect of a group's internal ties and the constituents of networking associations within that group (Michl & Audretsch, 2006). For instance, strong associations between collectives within a group help in forming trust and norms that speed up the functioning of the group and helps in achieving social objectives. Bridging social capital perspective looks at an individual's networks and relationships, and how these external social ties are used as a resource for the benefit of that individual (Michl & Audretsch, 2006). Therefore, social capital helps in understanding the success achieved by individuals in the form of the utilisation of their resources like contacts and social ties for their benefit.

In the case of entrepreneurship, social capital can be considered as a resource that facilitates the functioning of the enterprise as it is an advantage provided by social institutions in the form of contacts and connections (Michl & Audretsch, 2006). "... is the goodwill and resources that emanate from an individual's network of social relationships, and its effects flow from the information, influence, and solidarity available to the entrepreneur (Adler & Kwon, 2002)" (Michl & Audretsch, 2006, p. 43). Information and influence have been regarded as the direct gains of social capital to entrepreneurs because access to information is a primary need for grasping opportunities and influence can be exercised by accumulating the past favours done to others in the associations. Thus, social capital also improves the significance, timing and value of information (Michl & Audretsch, 2006).

Since social entrepreneurs face similar challenges like commercial entrepreneurs to access and accumulate resources, therefore social entrepreneurs can also use social capital to get some

advantage in operating their venture (Stephan, Uhlander, & Stride, 2015). For example, social capital can help in reducing the transaction costs by developing access to resources through networks and connections. To make an impact and bring about a social change, entrepreneurs need to form cooperative ties with various stakeholders (Stephan, Uhlander, & Stride, 2015). Hence, social capital acts as a resource for social enterprises and is vital in resource-constrained situations.

4.3. Conclusion

This chapter described the use of Theory of Change in the study and the extension of business model ontology to social businesses. In the next chapter, the researcher has explained and discussed the validation of figure 3 (Top Level Ontology for Social Business Value Proposition), figure 6 (Sub-Ontology for Value Proposition), figure 7 (Sub-Ontology for Stakeholder Interface), and figure 8 (Sub-Ontology for Resources) through a case study on a social venture from India.

5. EXPLORATORY CASE STUDY AND DISCUSSION

This chapter gives an overview of the social venture used in the case study, explains and discusses the validation of the ontology, and demonstrates the applicability of the ontology in the real-world through instantiation. Lastly, it describes the limitation of this research.

5.1. Description of the Case Study

Bharat Calling is an enterprise of Shri Ramesh Prakash Samajik Sansthan based in central India and was started as a part of a business project in 2009 developed at Tata Institute of Social Sciences. The co-founder Sandeep Mehto began his work by analysing the situation of tribal students in government secondary schools (Mehra, 2014). He discovered that the drop-out rate in the secondary schools was as high as 82% because of "... poverty, a distance of educational institution from home, lack of information and motivation, inadequate transport facilities, quality of teachers, social environment and many other factors" (Mehra, 2014, para. 3). Sandeep decided to reduce the drop-out rate by motivating students to study further and counselling them about the various educational options available for them. Bharat Calling additionally provides a platform to the marginalised youth to prepare for the different entrance exams and to face after admission challenges like getting accustomed to the urban lifestyle. (Dafria, 2011).

An interview was conducted with Sandeep to explain the ontology and receive his feedback. The information about the venture was gathered through multiple sources like annual reports of the venture, information available on the internet and the interview with the co-founder. Sandeep was aware of the business model canvas and has been using the theory of change with the students in entrepreneurship workshops. The co-founder of Bharat Calling was impressed with the different models explained to him and appreciated the interconnections between different concepts as he could easily relate and understand.

5.2. Validation through Case Study

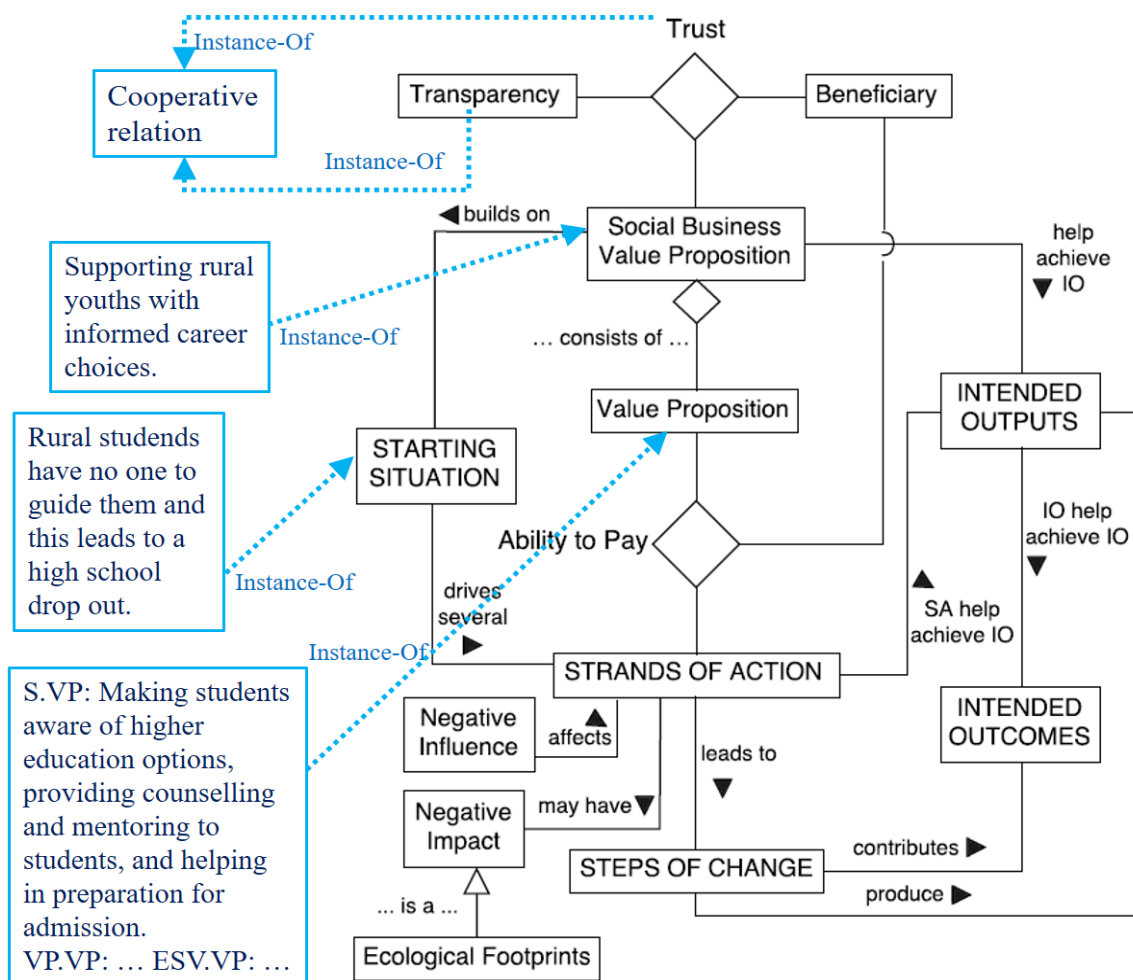
5.2.1. Validation of Top Level Ontology for Social Business Value Proposition

Figure 9 below demonstrates the instantiation of top-level ontology for social business value proposition.

- According to Sandeep, trust was associated with transparency, beneficiary and social business value proposition since it is important for him to gain the trust of students, their parents, teachers, government officials and his funders among other beneficiaries for delivering the social business value proposition of his organisation. Creating transparency enables his beneficiaries to have more trust in the organisation and facilitates smooth delivery of the organisation's offerings.
- Social business value proposition (supporting rural youths with informed career choices) of Bharat Calling is an aggregation of value proposition(s) (making students aware of higher education options, providing counselling and mentoring to students, and helping in preparation for admission).
- In case any of the beneficiary's ability to pay the organisation changes, the value propositions of the social venture will get modified and consequently affect the strands of action. For example, the government has the ability to pay money to Bharat Calling but receiving funding from the government creates limitations on the working style of the venture because of the rigid government policies and systems. Sandeep is considering expanding the organisations functioning to private schools as well (new

strands of action). In this case, the value proposition will change to ‘supporting rural youths with informed career choices’.

- The social business value proposition (supporting rural youths with informed career choices) was built on the starting situation (the analysis of the situation in tribal villages, need to get government permission to visit rural schools and guide students there). Starting situation drove several strands of action (taking more volunteers, arranging more funds, expanding the work to the preparation of entrance exams and resolving logistical issues for students’ admission) and *helped achieve* intended outputs (more exposure and awareness for students).
- The funding from DBS (The Development Bank of Singapore), via Tata Institute of Social Sciences, caused some negative influence when DBS decided to cease the funding for Bharat Calling as the social venture was not ready for this phase and lacked financial sustainability.
- Bharat Calling has not looked into the negative impact of its venture, especially in the terms of ecological footprints. But the entrepreneur agreed that every venture has some negative impact resulting from its functioning.
- Strands of action is an aggregate of steps of change (more educated rural youth, lesser poverty, empowered tribal community) that *contribute* to intended outputs. Steps of change also *produce* intended outcomes (by 2014, the work expanded to 142 schools covering 20,000 students annually, ensured a decrease in the dropout rate and increased awareness about career choices among students).



- The value proposition, supporting rural youths with informed career choices, consists of positive externalities such as reducing drop-out rate at school, challenging caste-based discrimination, the changed mindset of parents regarding their children's future, and addressing gender base biases and early marriage of girls.
- Empowerment of students was another positive externality as students gained confidence through the mentoring sessions and Bharat Calling provided them with the platform that made them feel empowered to take decisions of their lives.
- The solution offered by the social enterprise is sustainable as the organisation is trying to create role models within the community who can encourage students to study further and help in making career choices. Thus, the sustainable solution provided by Bharat Calling will ultimately make the venture obsolete.
- The value creation is high because Bharat Calling significantly contributed to the career growth of the students in tribal and other villages while using minimum resources.

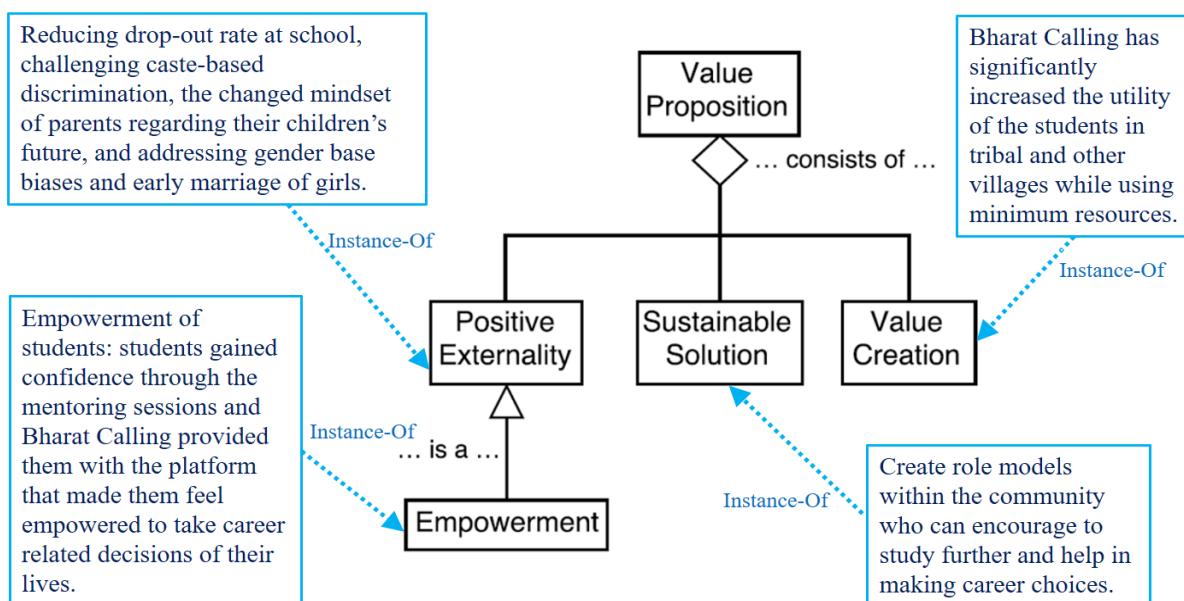


Figure 10. Instantiation of Sub-Ontology for Value Proposition

5.2.3. Validation of Sub-Ontology for Stakeholder Interface

Figure 11 below shows the instantiation of sub-ontology for stakeholder interface.

- Per the co-founder of Bharat Calling, the organisation has following beneficiary: employees of the social venture, students were the recipients, DBS as venture philanthropists, tribal and other villages as a community, government, and government schools as clients.
- Sandeep felt that the organisation had relational relation with the students and employees which can be categorised as high entwinement level. Transactional relation existed with DBS, government and Tata Institute of Social Sciences (his university that provided incubation and social capital) which can be categorised as moderate entwinement level. A donor/recipient relation with the community and the government schools which can be categorised as low entwinement level.

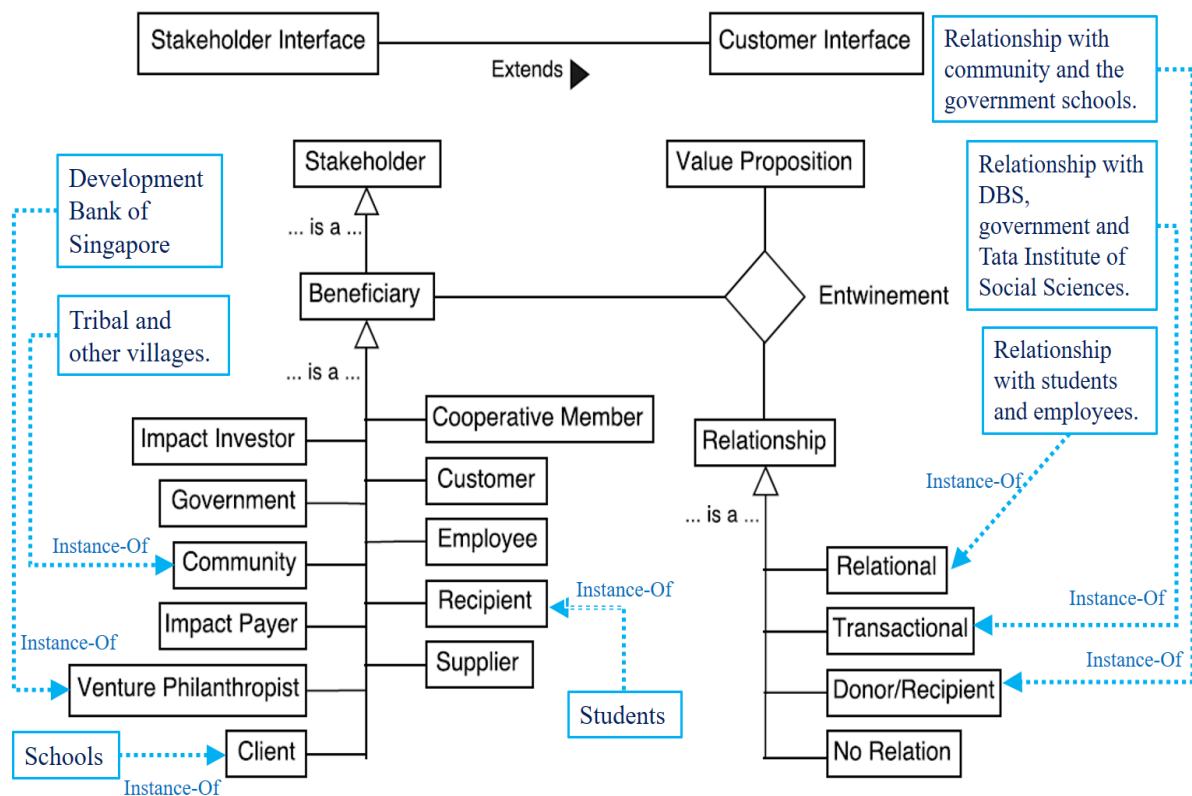


Figure 11. Instantiation of Sub-Ontology for Stakeholder Interface

5.2.4. Validation of Sub-Ontology for Resources

Figure 12 below displays the instantiation of sub-ontology for resources.

- The rhetoric strategy was immensely used by Sandeep to negotiate, convince, explain, and challenge different beneficiary in varied circumstances. For example, Sandeep used rhetoric strategy to convince parents of students to send their children with Sandeep to the city to fulfil admission procedures in universities. He also used rhetoric strategy to build his social capital. For example, he had persuaded the government officials to give him permission to counsel students in government schools. Government officials, in turn, had put him in contact with school staff who gave him contacts of students' parents. Students' parents became staunch supporters of Bharat Calling as they realised the good work being done by the organisation. This resulted in a step-wise accumulation of social capital through rhetoric strategy.
- Sandeep considers Tata Institute of Social Sciences (TISS) as one of the biggest social capitals he has because his university provided with him a lot of exposure and helped in forming the understanding of social entrepreneurship. TISS supported him to start his venture and making new connections to get funding and resources. Sandeep's family reputation was also a big social capital since it helped in gaining people's trust.

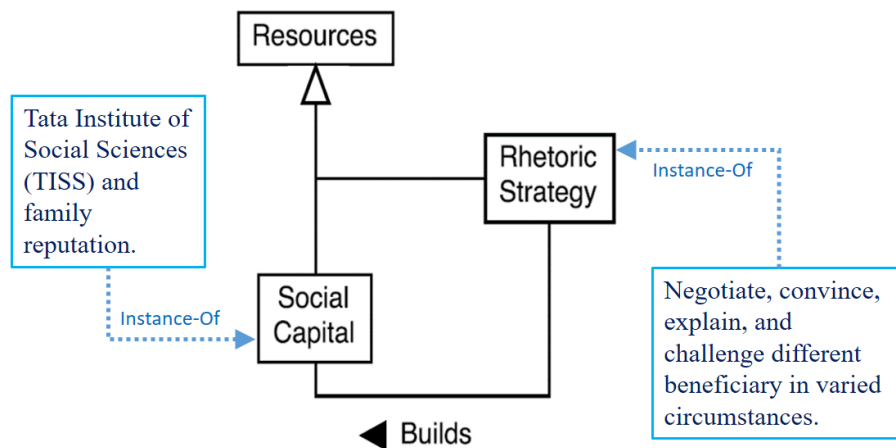


Figure 12. Instantiation of Sub-Ontology for Resources

In the end of the interview, the Sandeep was asked:

“How useful would this exercise, of using this tool, have been if you were now starting your current project from the beginning?”

- Sandeep stated that the tool would have been a great help as it would have provided an understanding of the social business and helped in planning the business model of Bharat Calling. “... having everything on one page, of course, is a great idea.” The entrepreneur found the models thought provoking and requested the researcher to do a presentation of it for his organisation’s employees.

5.3. Discussion

The researcher would now like to go back to the research question:

How can business model ontology be extended, so that it covers the social business perspectives to be used by the social entrepreneur in the process of development of the social business model?

The case study above illustrates that the research question for this study is answered by the ontology developed. The following points unfold the process one step at a time:

- The top-level ontology for social business value proposition picturises that how a social venture strategizes to achieve the intended social change. Keeping in mind that the process is gradual and should unfold under an umbrella of transparency and trust. Moreover, the key issue of the ability to pay was handled in a way that it models not only the value proposition but the way ahead (strands of action).
- The sub-ontology for value proposition shows that value proposition consists of value creation, sustainable solution and positive externality. Additionally, empowerment is a positive externality and by default a part of the value proposition. These components are recognized both by the literature and the experts, but also by the social entrepreneur.
- Moreover, the sub-Ontology for stakeholder interface demonstrates the extension of customer interface, by Osterwalder (2004), to stakeholder interface for making it suitable for social businesses. The beneficiary is a stakeholder and could be either a cooperative member, customer, employee, recipient, supplier, impact investor, government, community, impact payer, venture philanthropist, or client. This extensive

list aims at covering all different possible scenarios that may arise in a social venture. This was further modelled as entwinement as an association among value proposition, relationship, and beneficiary. The entwinement level may vary depending on the type of relationship (no relation, donor/recipient, transactional, and relational) that an organisation has with a beneficiary and the value proposition it offers to that beneficiary.

- The sub-ontology for resources is a resource that helps build social capital which is also a resource. As confirmed by the social entrepreneur, the rhetoric facilitates in securing legitimacy for the organisation.

The ontology built in this study also answers efficaciously to the competency questions.

- It identifies the knowledge domains present in the social business.
- The social business value proposition ontology extends the business model ontology and covers all the social business perspectives.
- The top-level ontology of social business value proposition embeds trust and transparency, discusses the process through which the social venture may achieve the desired outcomes, and describes the outcomes of a social venture.
- The stakeholder interface sub-ontology pictures all possible stakeholders that may play a role in a social venture and defines the different levels of entwinement which stakeholders may have with the social business organisation.
- Lastly, the sub-ontology for resources integrates the social meta-narratives perspectives, as well as their impact, into the business model ontology extension.

Therefore, this study has effectively answered the research question and the competency questions posed. The exploratory case study helped in validating the ontology and by using the examples from Bharat calling it was also shown that the ontology represented social businesses in a correct manner. The responses from the social entrepreneur and the instantiation of the ontology were assuring of the applicability of the ontology. Therefore, it can be said that this research has successfully extended the business model ontology by Osterwalder (2004) to social businesses, within the limitation of study outlined below.

5.4. Limitations of the Study

The researcher wanted to conduct more interviews to further validate the competency questions by using a more extensive sample of both experts and case studies. The restricted amount of time allocated for working on a dissertation, in a master's course, creates limitations.

6. CONCLUSION

Through the understanding developed from different papers on social entrepreneurship, it is safe to say that social enterprises focus their business know-how on finding and implementing long-term solutions that resolve social issues and generate lasting positive effects. Hence, the manner of functioning of a social venture will always be somewhat different than a commercial one. The existing business strategies and solutions are not compatible with social ventures because social enterprises give higher priority to value creation than value appropriation.

The business model ontology, reflected in the business model canvas, developed by Osterwalder doesn't take into account the factors like externalities, social capital, entwinement, among others that impact a social venture. There exist a few social business model canvases developed by different scholars. Nevertheless, these canvases fail to integrate some key concepts that are unique to social entrepreneurship. Therefore, the objective of this research was to build a new framework for modelling a social business by extending the existing ontology of business model.

The thorough literature review helped in finding the gap in existing body of knowledge as well as provided concepts and perspectives that when put together, and connected, gave a novel framework for portraying social businesses. Ontology development and Design approach was used to create a new business model ontology. The evaluation of the ontology was done by interviewing experts from the field of social entrepreneurship and validated with an exploratory case study. Both these processes turned out to be positive and provided reassuring feedbacks about the ontology. The instantiation of the ontology demonstrated the real-life applicability of the results of this research, a novel Ontology of Modelling Social Businesses.

Despite the limitations of this research and the future work required for further growth, this study has could extend the business model ontology to social businesses. The artifacts constructed in this research contribute to the existing body of knowledge by providing a unified social business ontology derived from diverse viewpoints and positions. This research not only uses the existing knowledge from the field of social entrepreneurship in new ways but also extends the body of knowledge of the field.

Recommendation for Social Entrepreneurs:

The current models are simple to understand and use. They could be of great assistance to entrepreneurs planning to start their social venture as the models give a framework to comprehend the functioning of social organisations. The ontology also supports the process of identifying the factors that could be detrimental for operating social ventures and the factors that could make it more efficient.

Future Work:

The researcher plans to turn the conceptual models into a social business model canvas that could be used by social entrepreneurs and academicians. More research work needs to be done on the negative impacts and negative influences of a social venture as there is a lack of literature on these topics in the field of social entrepreneurship.

BIBLIOGRAPHY

- Ann Kristin Achleitner, Wolfgang Spiess-Knafl, S. V. (2014). The financing structure of social enterprises : conflicts and implications. *Int. J. Entrepreneurial Venturing*, 10(Y, xxxx), 1–15. Retrieved from https://www.researchgate.net/publication/264822976_The_financing_structure_of_social_enterprises_Conflicts_and_implications
- Ashoka. (2014). 4 Ways to Supercharge Your Social Enterprise Through Accountability. *Forbes*, 1–27. Retrieved from <https://www.forbes.com/sites/ashoka/2014/06/30/4-ways-to-supercharge-your-social-enterprise-through-accountability/#70e5cb1a83c5>
- Awaworyi Churchill, S. (2017). Fractionalization, entrepreneurship, and the institutional environment for entrepreneurship. *Small Business Economics*, 48(3), 577–597. <https://doi.org/10.1007/s11187-016-9796-8>
- Bacq, S., & Lumpkin, G. T. (2014). Can Social Entrepreneurship Researchers Learn from Family Business Scholarship? A Theory-Based Future Research Agenda. *Journal of Social Entrepreneurship*, 5(3), 270–294. <https://doi.org/10.1080/19420676.2014.939693>
- Beckmann, M., & Zeyen, A. (2013). Franchising as a Strategy for Combining Small and Large Group Advantages (Logics) in Social Entrepreneurship: A Hayekian Perspective. *Nonprofit and Voluntary Sector Quarterly*, 43(3), 502–522. <https://doi.org/10.1177/0899764012470758>
- beneficiary Meaning in the Cambridge English Dictionary. (n.d.). Retrieved November 21, 2016, from <http://dictionary.cambridge.org/dictionary/english/beneficiary>
- Blount, J., & Nunley, P. (2014). What Is a “Social” Business and Why Does the Answer Matter? *Brooklyn Journal of Corporate, Financial & Commercial Law*, 8(2), 278–316. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=buh&AN=96117371&site=ehost-live>
- Brest, P., & Born, K. (2013). When Can Impact Investing Create Real Impact? Retrieved March 27, 2017, from https://ssir.org/up_for_debate/article/impact_investing
- Brian, K. (2007). OECD Insights Human Capital How what you know shapes your life. In *OECD Insights: Human Capital: How what you know shapes your life* (pp. 102–105). Paris: OECD Publishing. <https://doi.org/10.1787/9789264029095-en>
- Burkett, I. (2013). Using the Business Model Canvas for Social Enterprise. Retrieved July 18, 2016, from <https://mbs.edu/getmedia/91cc0d01-3641-4844-b34c-7aee15c8edaf/Business-Model-for-SE-Design-Burkett.pdf>
- Chen, C.-H. (2007). Efficient Wage Theory. Retrieved February 23, 2017, from https://ocw.mit.edu/courses/economics/14-01-principles-of-microeconomics-fall-2007/lecture-notes/14_01_lec34.pdf
- Chepureenko, A. (2015). Entrepreneurship Theory: New challenges and future prospects. *Foresight Russia*, 9(2), 44–57. <https://doi.org/10.17323/1995-459X.2015.2.44.57>
- Cohen, B., & Munoz, P. (2015). Toward a Theory of Purpose-Driven Urban

- Entrepreneurship. *Organization & Environment*, 28(3), 264–285.
<https://doi.org/10.1177/1086026615600883>
- Cranefield, S., Haustein, S., & Purvis, M. (2001). UML-based ontology modelling for software agents. In S. Cranefield, T. Finin, & S. Willmott (Eds.), *Proceedings of the Workshop on Ontologies in Agent Systems, 5th International Conference on Autonomous Agents* (pp. 1–8). Montreal: CEUR-WS.
- Dafria, A. (2011). Bharat Calling – Educating and Transforming Rural India. Retrieved June 8, 2017, from <https://yourstory.com/2011/12/bharat-calling-educating-and-transforming-rural-india/>
- Datta, P. B., & Gailey, R. (2012). Empowering Women Through Social Entrepreneurship: Case Study of a Women’s Cooperative in India. *Entrepreneurship: Theory and Practice*, 36(3), 569–587. <https://doi.org/10.1111/j.1540-6520.2012.00505.x>
- Dubé, L., & Paré, G. (2003). RIGOR IN INFORMATION SYSTEMS POSITIVIST CASE RESEARCH: CURRENT PRACTICES, TRENDS, AND RECOMMENDATIONS. *MIS Quarterly*, 27(4), 597–635. <https://doi.org/10.2307/30036550>
- Dzombak, R., Mehta, C., Mehta, K., & Bilén, S. G. (2013). The praxis of systems thinking for concurrent design space and business strategy exploration. *Proceedings of the 3rd IEEE Global Humanitarian Technology Conference, GHTC 2013*, (July 2016), 438–446. <https://doi.org/10.1109/GHTC.2013.6713726>
- Ebrashi, R. El. (2013). Social entrepreneurship theory and sustainable social impact. *Social Responsibility Journal*, 9(2), 188–209. <https://doi.org/10.1108/SRJ-07-2011-0013>
- Fassin, Y. (2008). *THE STAKEHOLDER MODEL REFINED*. Ghent. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.133.1406&rep=rep1&type=pdf>
- Forster, F., & Grichnik, D. (2013). Social Entrepreneurial Intention Formation of Corporate Volunteers. *Journal of Social Entrepreneurship*, 4(October), 153–181.
<https://doi.org/10.1080/19420676.2013.777358>
- Gauntlett, D. (2011). Making is Connecting: The social meaning of creativity, from DIY and knitting to YouTube and Web 2.0. <https://doi.org/10.2307/952752>
- government - definition of government in English | Oxford Dictionaries. (n.d.). Retrieved May 5, 2017, from <https://en.oxforddictionaries.com/definition/government>
- Gras, D., & Mendoza-Abarca, K. I. (2014). Risky business? The survival implications of exploiting commercial opportunities by nonprofits. *Journal of Business Venturing*, 29(3), 392–404. <https://doi.org/10.1016/j.jbusvent.2013.05.003>
- Greenwald, T. (2012). Business Model Canvas: A Simple Tool For Designing Innovative Business Models. Retrieved June 7, 2017, from <http://www.forbes.com/sites/tedgreenwald/2012/01/31/business-model-canvas-a-simple-tool-for-designing-innovative-business-models/>
- Grossman, A., Appleby, S., & Reimers, C. (2013). Venture philanthropy: Its evolution and its future. *Technical Note, Background*(April), 1–25. Retrieved from <http://evpa.eu.com/wp-content/uploads/2010/11/VP-Its-Evolution-and-Its-Future->

- Hechavarría, D. M. (2015). The impact of culture on national prevalence rates of social and commercial entrepreneurship. *International Entrepreneurship and Management Journal*, (July). <https://doi.org/10.1007/s11365-015-0376-1>
- Hevner, A. R., March, S. T., Park, J., & Ram, S. (2004). Design Science in Information Systems Research. *MIS Quarterly*, 28(1), 75–105. Retrieved from http://wise.vub.ac.be/thesis_info/design_science.pdf
- Hjorth, D. (2013). Public entrepreneurship: desiring social change, creating sociality. *Entrepreneurship & Regional Development*, 25(January), 34–51. <https://doi.org/10.1080/08985626.2012.746883>
- Holsapple, C. W., & Joshi, K. D. (2002). A collaborative approach to ontology design. *Communications of the ACM*, 45(2), 42–47. <https://doi.org/10.1145/503124.503147>
- International Network on Strategic Philanthropy. (2005). Theory of Change Tool Manual, (May), 1–13. <https://doi.org/10.1186/1748-5908-6-76>
- John, R. (2006). *Venture philanthropy: the evolution of high engagement philanthropy in Europe*. Oxford. Retrieved from [http://www.sbs.ox.ac.uk/sites/default/files/Skoll_Centre/Docs/Venture philanthropy in Europe.pdf](http://www.sbs.ox.ac.uk/sites/default/files/Skoll_Centre/Docs/Venture%20philanthropy%20in%20Europe.pdf)
- Jung, K., Jang, H. S., & Seo, I. (2016). Government-driven social enterprises in South Korea: lessons from the Social Enterprise Promotion Program in the Seoul Metropolitan Government. *International Review of Administrative Sciences*, 82(3), 598–616. <https://doi.org/10.1177/0020852315586935>
- Kennedy, E. D. (2016). *Positioning the Beneficiary: The Role of Entwinement in Social Enterprise Impact and Performance Management*. University of Massachusetts Boston. Retrieved from http://scholarworks.umb.edu/cgi/viewcontent.cgi?article=1243&context=doctoral_dissertations
- Kury, K. W. (2014). A developmental and constructionist perspective on social entrepreneur mobilisation. *International Journal of Entrepreneurial Venturing*, 6(1), 22–36. <https://doi.org/10.1504/IJEV.2014.059403>
- Laing, K., & Todd, L. (2015). Theory-based Methodology : Using theories of change in educational development, research and evaluation, (September), 1–32. Retrieved from <http://www.ncl.ac.uk/cflat/publications/documents/theoryofchangeguide.pdf>
- Lee, M., Battilana, J., & Wang, T. (2014). Building an Infrastructure for Empirical Research on Social Enterprise: Challenges and Opportunities. In J. Short, D. J. Ketchen Jr., & D. D. Bergh (Eds.), *Social Entrepreneurship and Research Methods* (First, Vol. 9, pp. 241–264). Emerald Group. https://doi.org/10.1108/S1479-8387_2014_0000009017
- Levy, Y., & Ellis, T. J. (2006). Towards a Framework of Literature Review Process in Support of Information Systems Research. *Informing Science*, 9(8), 171–181. <https://doi.org/10.1093/nar/gkp145>
- Lewis, K. V. (2013). The power of interaction rituals: The Student Volunteer Army and the

- Christchurch earthquakes. *International Small Business Journal*, 31(7), 811–831.
<https://doi.org/10.1177/0266242613478438>
- Mair, J. (2010). *Social entrepreneurship: taking stock and looking ahead* (WP No. 888). Barcelona. Retrieved from
[http://www.ub.edu/emprenedoriasocial/sites/default/files/Social entrepreneurship_taking stock and looking ahead.pdf](http://www.ub.edu/emprenedoriasocial/sites/default/files/Social%20entrepreneurship_taking%20stock%20and%20looking%20ahead.pdf)
- Mehra, S. (2014). Bharat Calling: Helping Bridge India's Education Gap | Sheran Mehra | Pulse | LinkedIn. Retrieved June 8, 2017, from
<https://www.linkedin.com/pulse/20140912084059-26142531-bharat-calling-helping-bridge-india-s-education-gap>
- Michl, T., & Audretsch, D. B. (2006). Social Capital, Cognition, and Entrepreneurial Opportunities: A Theoretical Framework. *ENTREPRENEURSHIP THEORY and PRACTICE*, 30(1), 41–56. <https://doi.org/10.1111/j.1540-6520.2011.00481.x>
- Mueller, S., D'Intino, R. S., Walske, J., Ehrenhard, M. L., Newbert, S. L., Robinson, J. a., & Senjem, J. C. (2014). What's Holding Back Social Entrepreneurship? Removing the Impediments to Theoretical Advancement. *Journal of Social Entrepreneurship*, 676(April 2015), 1–12. <https://doi.org/10.1080/19420676.2014.954259>
- Muñoz, P., & Kibler, E. (2016). Institutional complexity and social entrepreneurship: A fuzzy-set approach. *Journal of Business Research*, 69(4), 1314–1318.
<https://doi.org/10.1016/j.jbusres.2015.10.098>
- Newbert, S. L., & Hill, R. P. (2014). Setting the Stage for Paradigm Development: A “Small-Tent” Approach to Social Entrepreneurship. *Journal of Social Entrepreneurship*, 5(3), 243–269. <https://doi.org/10.1080/19420676.2014.889738>
- Nguyen, L., Szkudlarek, B., & Seymour, R. G. (2015). Social impact measurement in social enterprises: An interdependence perspective. *Canadian Journal of Administrative Sciences / Revue Canadienne Des Sciences de l'Administration*, 32(4), 224–237.
<https://doi.org/10.1002/cjas.1359>
- Nicholls, A. (2010). The legitimacy of social entrepreneurship: Reflexive isomorphism in a pre-paradigmatic field. *Entrepreneurship: Theory and Practice*, 34(4), 611–633.
<https://doi.org/10.1111/j.1540-6520.2010.00397.x>
- Noy, N. F., & McGuinness, D. L. (2001). *Ontology Development 101: A Guide to Creating Your First Ontology*. Knowledge Systems Laboratory Stanford University. Stanford. Retrieved from
http://protege.stanford.edu/publications/ontology_development/ontology101.pdf
- OECD Glossary of Statistical Terms - Transparency Definition. (2002). Retrieved May 15, 2017, from <https://stats.oecd.org/glossary/detail.asp?ID=4474>
- Osterwalder, A. (2004). *THE BUSINESS MODEL ONTOLOGY A PROPOSITION IN A DESIGN SCIENCE APPROACH*. l'Université de Lausanne. Retrieved from
http://www.hec.unil.ch/aosterwa/PhD/Osterwalder_PhD_BM_Ontology.pdf
- Paniagua, J., Mas-Tur, A., & Sapena, J. (2015). Is social entrepreneurship a greenfield for foreign direct investment? A conceptual and empirical analysis. *Canadian Journal of*

- Administrative Sciences*, (July 2016). <https://doi.org/10.1002/cjas.1341>
- Phillips, D. L. (2014). Looking Backward: A Critical Appraisal of Communitarian Thought - Derek L. Phillips - Google Books. Retrieved May 23, 2017, from <https://books.google.pt/books?id=mUAABAAQBAJ&pg=PA14&lpg=PA14&dq=%22A+group+of+people+who+live+in+a+common+territory,+have+a+common+history+and+shared+values,+participate+together+in+various+activities,+and+have+a+high+degree+of+solidarity%22&source=bl&o>
- Pless, N. M. (2012). Social Entrepreneurship in Theory and Practice-An Introduction. *Journal of Business Ethics*, 111(3), 317–320. <https://doi.org/10.1007/s10551-012-1533-x>
- Qastharin, A. R. (2014). *Understanding the business model of social enterprise: A case study of Indonesia Mengajar*. KTH ROYAL INSTITUTE OF TECHNOLOGY. Retrieved from <http://www.diva-portal.org/smash/get/diva2:782135/FULLTEXT01.pdf>
- Rao, V. (2012). Entrepreneurs Are The New Labor: Part I. Retrieved May 11, 2017, from <https://www.forbes.com/sites/venkateshrao/2012/09/03/entrepreneurs-are-the-new-labor-part-i/#771931d84eab>
- Robb, C., & Gandhi, S. J. (2016). Social entrepreneurial ventures: On the edge of chaos? *Entrepreneurship Research Journal*, 6(1), 111–133. <https://doi.org/10.1515/erj-2015-0030>
- Ruebottom, T. (2013). The microstructures of rhetorical strategy in social entrepreneurship: Building legitimacy through heroes and villains. *Journal of Business Venturing*, 28(1), 98–116. <https://doi.org/10.1016/j.jbusvent.2011.05.001>
- Rumbaugh, J., Jacobson, I., & Booch, G. (2007). *The Unified Modeling Language Reference Manual. Zentralblatt für Bakteriologie, Parasitenkunde, Infektionskrankheiten und Hygiene. Erste Abteilung Originale. Reihe A: Medizinische Mikrobiologie und Parasitologie* (Second, Vol. 240). Michigan: Addison-Wesley. Retrieved from https://www.utdallas.edu/~chung/Fujitsu/UML_2.0/Rumbaugh--UML_2.0_Reference_CD.pdf
- Santos, F. M. (2009). *A positive theory of social entrepreneurship* (No. 2009/23/EFE/ISIC). Fontainebleau. Retrieved from <https://sites.insead.edu/facultyresearch/research/doc.cfm?did=41727>
- Schaefer, F., Luksch, U., Steinbach, N., Cabeça, J., & Hanauer, J. (2006). *Ecological Footprint and Biocapacity*. Luxembourg. Retrieved from www.footprintnetwork.org
- Shah, J. (2011). Impact Investing Defined. Retrieved March 27, 2017, from http://www.huffingtonpost.com/jigar-shah/impact-investing-defined_b_941916.html
- Sinkovics, N., Sinkovics, R. R., & Yamin, M. (2014). The role of social value creation in business model formulation at the bottom of the pyramid - Implications for MNEs? *International Business Review*, 23(4), 692–707. <https://doi.org/10.1016/j.ibusrev.2013.12.004>
- Smith, B., Meyskens, M., & Wilson, F. (2014). Should We Stay or Should We Go? “Organizational” Relational Identity and Identification in Social Venture Strategic

- Alliances. *Journal of Social Entrepreneurship*, 5(3), 295–317.
<https://doi.org/10.1080/19420676.2014.927389>
- Spear, R. (2006). Article information : *International Journal of Social Economics*, 33(5/6), 399–410. <https://doi.org/10.1108/09574090910954864>
- Stephan, U., Uhlander, L., & Stride, C. (2015). Institutions and social entrepreneurship: The role of institutional voids, institutional support, and institutional configurations. *Journal of International Business Studies*, 46(3), 308–331. <https://doi.org/10.1057/jibs.2014.38>
- Thomas Helbling. (2010). What Are Externalities? Retrieved February 23, 2017, from <http://www.imf.org/external/pubs/ft/fandd/2010/12/basics.htm>
- trust - definition of trust in English | Oxford Dictionaries. (n.d.). Retrieved May 15, 2017, from <https://en.oxforddictionaries.com/definition/trust>
- Uygur, U., & Marcoux, A. M. (2013). The Added Complexity of Social Entrepreneurship: A Knowledge-Based Approach. *Journal of Social Entrepreneurship*, 4(2), 132–152.
<https://doi.org/10.1080/19420676.2013.777357>
- Vestrum, I., & Rasmussen, E. (2013). How community ventures mobilise resources: Developing resource dependence and embeddedness. *International Journal of Entrepreneurial Behaviour & Research*, 19(3), 283–302.
<https://doi.org/10.1108/13552551311330183>
- Welter, F. (2011). Contextualizing Entrepreneurship—Conceptual Challenges and Ways Forward. *Entrepreneurship Theory and Practice*, 35(1), 165–184.
<https://doi.org/10.1111/j.1540-6520.2010.00427.x>
- Zacharakis, A., Erikson, T., & George, B. (2010). Conflict between the VC and entrepreneur: the entrepreneur's perspective. *Venture Capital*, 12(2), 109–126.
<https://doi.org/10.1080/13691061003771663>
- Zafeiropoulou, F. A., & Koufopoulos, D. N. (2013). The Influence of Relational Embeddedness on the Formation and Performance of Social Franchising. *Journal of Marketing Channels*, 20(1–2), 73–98. <https://doi.org/10.1080/1046669X.2013.747861>

ANNEX A

*BM – Business Model

Table 3. Starting Situation

Name of BM-Element	Starting Situation
Definition	“What is the situation you face? What are the underlying causes?” (Laing & Todd, 2015, p. 4) “At what depth or level do you want to work?” (International Network on Strategic Philanthropy, 2005, p. 11)
Part of	Social Business Value Proposition
References	(Laing & Todd, 2015), (International Network on Strategic Philanthropy, 2005).

Table 4. Strands of Action

Name of BM-Element	Strands of Action
Definition	“How will these changes be made? What actions will you take?” (Laing & Todd, 2015, p. 4) “What impact do you want to achieve? What would a solution to the issue/problem look like?” (International Network on Strategic Philanthropy, 2005, p. 11)
Part of	Social Business Value Proposition
References	(Laing & Todd, 2015), (International Network on Strategic Philanthropy, 2005).

Table 5. Intended Outputs

Name of BM-Element	Intended Outputs
Definition	“How do you want things to be different? What will participants experience as different?” (Laing & Todd, 2015, p. 4)
Part of	Social Business Value Proposition
References	(Laing & Todd, 2015)

Table 6. Steps of Change

Name of BM-Element	Steps of Change
Definition	“What effect will those actions have? On whom? By when? What will happen next? What will happen after that?” (Laing & Todd, 2015, p. 4) “Who/what would be impacted?” (International Network on Strategic Philanthropy, 2005, p. 11)

Part of	Social Business Value Proposition
References	(Laing & Todd, 2015), (International Network on Strategic Philanthropy, 2005).

Table 7. Intended Outcomes

Name of BM-Element	Intended Outcomes
Definition	<p>“How will you know if change is happening? What will you see? How will you measure that? What might prevent this from happening?” (Laing & Todd, 2015, p. 4)</p> <p>“How could you reach/influence/impact the identified groups/structures? What resources (financial, time, skills and knowledge) would you need to employ these tools and processes to effectively influence the target groups? What vehicles (tools or processes) could you use? Which resources do you already have?” (International Network on Strategic Philanthropy, 2005, p. 11)</p>
Part of	Social Business Value Proposition
References	(Laing & Todd, 2015), (International Network on Strategic Philanthropy, 2005).

Table 8. Negative Influence

Name of BM-Element	Negative Influence
Definition	<p>“Investors have won, and their dealings with the entrepreneur class now look far more like the dealings between management and labor”. (Rao, 2012)</p> <p>Negative Influence is a result of the skewed power dynamics between funding agencies and social entrepreneurs that have an unfavourable effect on the social business model. It may result in the alteration of the Intended Outcomes and Intended Outputs.</p>
Part of	Social Business Value Proposition
References	(Rao, 2012)

Table 9. Negative Impact

Name of BM-Element	Negative Impact
Definition	The negative impact is adverse effects or negative externalities (uncompensated third-party effects) that may result from the actions of social enterprises. Since no organisation would operate in a way that would create only positive impacts.
Part of	Social Business Value Proposition
References	(Anner, 2014)

Table 10. Ability to Pay

Name of BM-Element	Ability to Pay
Definition	The capability of a Beneficiary to pay financially for the product/service of a social enterprise.
Part of	Social Business Value Proposition

Table 11. Ecological Footprint

Name of BM-Element	Ecological Footprints
Definition	“The ecological footprint (EF) measures how much bioproductive area (whether land or water) a population would require to produce on a sustainable basis the renewable resources it consumes, and to absorb the waste it generates, using prevailing technology.” (Schaefer, Luksch, Steinbach, Cabeça, & Hanauer, 2006, p. 5)
Part of	Social Business Value Proposition
References	(Schaefer, Luksch, Steinbach, Cabeça, & Hanauer, 2006)

Table 12. Trust

Name of BM-Element	Trust
Definition	“Firm belief in the reliability, truth, or ability of someone or something.” (“trust - definition of trust in English Oxford Dictionaries,” n.d.)
Part of	Social Business Value Proposition
References	(“trust - definition of trust in English Oxford Dictionaries,” n.d.)

Table 13. Transparency

Name of BM-Element	Transparency
Definition	“Transparency refers to an environment in which the objectives of policy, its legal, institutional, and economic framework, policy decisions and their rationale, data and information related to monetary and financial policies, and the terms of agencies’ accountability, are provided to the public in a comprehensible, accessible, and timely manner.” (“OECD Glossary of Statistical Terms - Transparency Definition,” 2002)
Part of	Social Business Value Proposition
References	(“OECD Glossary of Statistical Terms - Transparency Definition,” 2002)

Table 14. Beneficiary

Name of BM-Element	Beneficiary
Definition	“A person or group who receives money, advantages, etc. as a result of something else (social enterprise)” (“beneficiary Meaning in the Cambridge English Dictionary,” n.d.)
Part of	Social Business Value Proposition
References	(Kennedy, 2016), (“beneficiary Meaning in the Cambridge English Dictionary,” n.d.).

Table 15. Positive Externality

Name of BM-Element	Positive Externality
Definition	“Action by one party benefits another party” (Chen, 2007, p. 2).
Part of	Value Proposition
References	(Chen, 2007), (“OECD Glossary of Statistical Terms - Externalities - OECD Definition,” 2003), (Santos, 2009), (Thomas Helbling, 2010).

Table 16. Empowerment

Name of BM-Element	Empowerment
Definition	“... process of increasing the assets and capabilities of individuals or groups to make purposive choices and to transform those choices into desired actions and outcomes” (Santos, 2009, p. 36).
Part of	Value Proposition
References	(Santos, 2009), (Datta & Gailey, 2012).

Table 17. Sustainable Solution

Name of BM-Element	Sustainable Solution
Definition	“Sustainable solutions are approaches that either permanently address the root causes of the problem or institutionalize a system that continuously addresses the problem, ideally with minimal intervention from the original innovators” (Santos, 2009, p. 33).
Part of	Value proposition
References	(Bacq & Lumpkin, 2014), (Dzombak et al., 2013), (Ebrashi, 2013), (Santos, 2009), (Uygur & Marcoux, 2013).

Table 18. Value Creation

Name of BM-Element	Value Creation
Definition	“Value creation from an activity happens when the utility of society’s members increases after accounting for the resources used in that activity” (Santos, 2009, p. 8). Value creation is understood in the context of the customers of an organisation.
Part of	Value Proposition
References	(Blount & Nunley, 2014), (Newbert & Hill, 2014), (Santos, 2009), (Sinkovics, Sinkovics, & Yamin, 2014).

Table 19. Stakeholder

Name of BM-Element	Stakeholder
Definition	“... any group or individual who can affect or is affected by the achievement of the organization’s objectives” (Kennedy, 2016, p. 15).
Part of	Stakeholder Interface
References	(Kennedy, 2016)

Table 20. Beneficiary

Name of BM-Element	Beneficiary
Definition	“A person or group who receives money, advantages, etc. as a result of something else (social enterprise)” (“beneficiary Meaning in the Cambridge English Dictionary,” n.d.)
Part of	Stakeholder interface
References	(Kennedy, 2016), (“beneficiary Meaning in the Cambridge English Dictionary,” n.d.).

Table 21. Cooperative Member

Name of BM-Element	Cooperative Member
Definition	“Cooperative member referred to beneficiaries that were members of a cooperative and shared ownership and decision-making responsibility, in addition to working within the enterprise” (Kennedy, 2016, p. 49).
Part of	Stakeholder interface
References	(Kennedy, 2016)

Table 22. Customer

Name of BM-Element	Customer
Definition	“Customer referred to beneficiaries who purchased a product from the enterprise, often at a discounted price” (Kennedy, 2016, p. 49).
Part of	Stakeholder interface
References	(Kennedy, 2016)

Table 23. Employee

Name of BM-Element	Employee
Definition	“Employee referred to beneficiaries who had paid employment within a social enterprise” (Kennedy, 2016, p. 49).
Part of	Stakeholder interface
References	(Kennedy, 2016)

Table 24. Recipient

Name of BM-Element	Recipient
Definition	“Recipient referred to beneficiaries who received free benefits and services” (Kennedy, 2016, p. 49).
Part of	Stakeholder interface
References	(Kennedy, 2016)

Table 25. Supplier

Name of BM-Element	Supplier
Definition	“Suppliers were beneficiaries who supplied a product to the enterprise, which led to a product sold to customers, often at a premium” (Kennedy, 2016, p. 49).
Part of	Stakeholder interface
References	(Kennedy, 2016)

Table 26. Impact Investor

Name of BM-Element	Impact Investor
Definition	The one that invests money into a social enterprise because of the positive externalities attached to the business but expects a financial return ranging from high to low (Brest & Born, 2013).

Part of	Stakeholder interface
References	(Brest & Born, 2013), (Grossman et al., 2013), (Shah, 2011).

Table 27. Venture Philanthropist

Name of BM-Element	Venture Philanthropist
Definition	“Venture philanthropists work in partnership with a wide range of organisations that have a clear social objective” (John, 2006, p. 10).
Part of	Stakeholder interface
References	(John, 2006), (Grossman, Appleby, & Reimers, 2013).

Table 28. Government

Name of BM-Element	Government
Definition	“The group of people with the authority to govern a country or state; a particular ministry in office” (“government - definition of government in English Oxford Dictionaries,” n.d.).
Part of	Stakeholder interface
References	(Cohen & Munoz, 2015), (Jung et al., 2016), (“government - definition of government in English Oxford Dictionaries,” n.d.)

Table 29. Impact Payer

Name of BM-Element	Impact Payer
Definition	An impact payer is willing to pay for the real (not expected) outcomes of a social impact venture and to internalise positive externalities.
Part of	Stakeholder interface

Table 30. Community

Name of BM-Element	Community
Definition	“A group of people who live in a common territory, have a common history and shared values, participate together in various activities, and have a high degree of solidarity” (Phillips, 2014, p. 14).
Part of	Stakeholder interface
References	(Bacq & Lumpkin, 2014), (Burkett, 2013), (Cohen & Munoz, 2015), (Phillips, 2014),

Table 31. Client

Name of BM-Element	Client
Definition	A person who only uses the services/products but doesn't purchase it. The client has the ability or capacity to influence the buying decision.
Part of	Stakeholder interface
Attributes	Inherited from Stakeholder

Table 32. Entwinement

Name of BM-Element	Entwinement
Definition	“... the mutual reliance and commitment between two parties, in these cases the enterprises and the individual beneficiaries they seek to serve” (Kennedy, 2016, p. 6).
Part of	Stakeholder interface
References	(Kennedy, 2016)

Table 33. Relationship

Name of BM-Element	Relationship
Definition	Patterns showing the interaction between the organisation and the beneficiaries (Kennedy, 2016).
Part of	Stakeholder interface
References	(Kennedy, 2016)

Table 34. No Relation

Name of BM-Element	No Relation
Definition	The firm and the beneficiary have no interaction (Kennedy, 2016).
Part of	Stakeholder interface
References	(Kennedy, 2016)

Table 35. Donor/Recipient

Name of BM-Element	Donor/Recipient
Definition	Depending on its objectives and its target beneficiaries, the organisation decides to provide certain services, goods or money (Kennedy, 2016).
Part of	Stakeholder interface
References	(Kennedy, 2016)

Table 36. Transactional

Name of BM-Element	Transactional
Definition	The organisation and the beneficiary participate in a transaction(s) whose rules are determined by the organisation (Kennedy, 2016).
Part of	Stakeholder interface
References	(Kennedy, 2016)

Table 37. Relational

Name of BM-Element	Relational
Definition	The organisation works directly with beneficiaries and gives them training and guidance (Kennedy, 2016).
Part of	Stakeholder interface
References	(Kennedy, 2016)

Table 38. Rhetoric

Name of BM-Element	Rhetoric
Definition	“Rhetoric is persuasive language (Green, 2004). It has been identified as a key tool in building legitimacy (Suchman, 1995), dislodging dominant institutions and creating systemic change (Suddaby and Greenwood, 2005)” (Ruebottom, 2013, p. 100).
Part of	Resources
References	(Ruebottom, 2013), (Kennedy, 2016).

Table 39. Social Capital

Name of BM-Element	Social Capital
Definition	“Social capital is the sum of the resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition. (Bourdieu, in Bourdieu & Wacquant, 1992: 119)” (Gauntlett, 2011, p. 2).
Part of	Resources
References	(Brian, 2007), (Gauntlett, 2011), (Michl & Audretsch, 2006), (Stephan et al., 2015).

ANNEX B

- Professor João Menezes - After working for a few years in private sector, he held management and leadership positions in the Chapitô Association and the NGO TESE, which operates in Portugal and Africa (“Universidade Católica Editora,” 2016). He then got into the public sector as Municipal Director of Social Action in the Lisbon City Hall. He was also Secretary of State for Youth and Sports of the XXI Constitutional Government of the Portuguese Republic and has been a guest lecturer in Management at ISCTE-IUL and at Universidade Católica Portuguesa (“João Wengorovius Meneses | LinkedIn,” n.d.). He holds a master's degree in "Development, Local Diversities and Global Challenges" from ISCTE-IUL and has attended several courses for executives in the area of management of non-profit organizations from Harvard University, Stanford University Graduate School of Business and INSEAD (“Universidade Católica Editora,” 2016).
He was the first interviewee who gave highly valuable and encouraging feedbacks for this study. Professor João suggested using Theory of Change for making more sense of the ontology.
- Professor Miguel Alves Martins is a co-founder of IES-SBS and is currently the CEO. He is also an Invited Assistant Professor at the New School of Business and Economics, where he teaches Social Entrepreneurship and Management of Non-Profit Organizations. He holds a Global Executive MBA from INSEAD and a Master's degree in Social Economy from ISCTE. (“Equipa — IES-Social Business School,” n.d.)
Professor Miguel found the work robust and gave some minor suggestions.
- Professor Helena Gata has ten years of experience in the social sector. She has worked in UK, Mozambique and Portugal. She is currently doing a PhD in Economic Organisational Sociology at ISEG. As a Social Entrepreneur, she started many social programs in Portugal and African countries that speak Portuguese. She is a guest faculty in some universities and often writes articles on social economy, social innovation, corporate social responsibility and employment issues. For fourteen years, she has been helping many social ventures to grow and progress. (“Helena Quoniam Gata | LinkedIn,” n.d.)
Professor Helena found the model complete and interesting. She gave some minor feedback for the ontology.